Tribhuvan University

Faculty of Education

Postgraduate Diploma in Education (PGDE)

First Semester Curricula

Tribhuvan University

Faculty of Education

Office of the Dean

Balkhu, Kathmandu

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List of Subjects

Introduction

The Faculty of Education, Tribhuvan University, has been producing qualified and trained teachers and teacher educators in Nepal for more than five decades. Among its various programs, the Bachelor's degree in education (B.Ed.) aims to produce qualified and trained teachers for school education. The Bachelor of Education (B.Ed.), organized and certified by the Faculty of Education (FoE) at Tribhuvan University (TU), has undergone changes over time to meet the evolving needs and demands of the country. Prior to 1996, a Two-Year B.Ed. program with a single area specialization was in practice for several years. In response to feedback regarding the perceived inadequacy of pedagogical knowledge and skills among graduates from the two-year B.Ed. program in terms of content mastery, the program's duration was extended to three years with a single area specialization starting from 1996.

Since 2016, a Four-Year B.Ed. program with a two-area specialization has been implemented, aligning with the requirements of schools and the Ministry of Education. This four-year B.Ed. initiative represents an integrated undergraduate program that encompasses theoretical courses across various subject areas, including English, Nepali, Science, Mathematics, History, Political Science, Economics, Geography, Population, Social Studies, Health, Physical Education, Special Needs Education and Bachelor in Information and Communication Technology Education (BICTE). Additionally, this program incorporates core professional courses that include teaching practicum.

In retrospect, the Faculty of Education introduced a 12-month Bachelor of Education (One-Year B.Ed.) Program through the College of Education, established by the Government in 1956 to pioneer teacher education and training programs for the country. The students with a bachelor's degree in any discipline were eligible for enrollment in the One-Year B.Ed. Program. Over the past two decades, the One-Year B.Ed. Program faced widespread criticism from various sectors due to deficiencies in its implementation process, including ineffectively organized practicum component. The program struggled to produce trained teachers, fostering essential pedagogical skills among the graduates.

In response, the Faculty of Education, under the decision of the Academic Council of Tribhuvan University, terminated the One-Year B.Ed. Program in 2021. Subsequently, an eighteen-month

(Three-Semester) Post-Graduate Diploma in Education has been developed and introduced in 2023 as a replacement for the traditional one-year B.Ed. program.

Rationale for Postgraduate Diploma in Education

Teaching is a dynamic profession that requires a specialized teacher preparation program. Teacher education is designed and revised for a process of professional preparation of teachers to move candidate along a path of acquiring knowledge of human development, learning theories related to classroom instruction, curriculum development and assessment on the top of the subject specific content knowledge. Professional preparation requires a long period of academic training and rigorous professional training in tandem with hands-on practical experiences in schools as well as a code of professional ethics. However, traditional one-year B.Ed. program seems to have outlived it relevance due to its inadequacy for effective student-centered and practical approaches to preparing teachers.

With the proliferation of the affiliated Campuses throughout the country, quality of teacher education program, including the one-year B. Ed, has been gradually declined and the programs have been criticized for inadequately addressing the needs of learners and curricula and not preparing professional teachers to make teaching student-centered, relevant and practical. The one-year program is criticized for effectively organized lessons in a regular basis with teaching practice in schools as a formality only. This conventional model largely criticized for the transmission of textbook knowledge and information from teachers to students. Consequently, the emphasis on teaching practice aims to familiarize future educators with this conventional approach, which prioritizes the dissemination of information through textbooks as a fundamental method of imparting knowledge to students. Existing B.Ed. program have become weak both in theory and practice. Education campuses/colleges have been criticized for being grounds of academic stagnation and resistance to change. In this context, there is a dire need to critically review the existing teacher education programs under FoE and revise traditional (one-year) B.Ed. Program.

The Post-Graduate Diploma in Education (PGDE) is a renewed and revised teacher education program for various subject tracks that is required to complete in three semesters (18 months). This program has replaced the earlier 12-month traditional one-year B.Ed. Program. Upon completion of theorical and practical courses of PGDE in campus, student teachers will

participate in internship in the selected schools for at least six months. In this way, the PGDE program is designed to meet the professional development needs of teachers in upper Basic and Secondary Schools by employing critical and participatory pedagogy, engaging students in hands-on practical activities and utilizing digital technologies.

The PGDE program intends to provide pedagogical training for students who hold educational qualification of bachelor's degree or equivalent and who are teaching at the basic and secondary level. This is a basic teacher training that sensitizes and orients teachers/prospective teachers to the fundamentals of their profession. It emphasizes on professional educational practices with a solid theoretical base in the foundation disciplines, curriculum, instructional design and methodology. It is also expected that prospective teachers will improve their skills in the specific content relevant to teaching in their subject areas and that administrators would increase their ability to manage their schools as an educational institution of quality.

Teaching is a dynamic profession that requires specialized courses and programs to prepare qualified and trained teachers. Teacher education programs are devised and revised to professionally prepare teachers, guiding candidates in acquiring knowledge concerning human development, learning theories relevant to classroom instruction, curriculum development, assessment techniques, and subject-specific content knowledge. Professional preparation demands extensive academic training, rigorous professional development alongside practical experiences in schools, and adherence to a code of professional ethics.

The one-year B.Ed. program appears to have lowered its relevance, as it requires to adapt to the evolving demands of professional preparation. Along with the proliferation of affiliated campuses across the country, the quality of teacher education programs, including the one-year B.Ed. programs, started to decline gradually. These programs faced criticism for their inadequacy to meet the needs of school curricula and their inability to prepare teachers capable of delivering quality education. The programs are often criticized for being teacher-centric and transmitting bookish knowledge to students. In addition, the one-year B.Ed. programs have been criticized for being deficient in both theory and practice, fostering academic stagnation and resistance to change within education campuses and colleges.

In this context, there exists a pressing need to critically evaluate the existing teacher education programs under the Faculty of Education (FoE) and revise the one-year B.Ed. Program. To

respond to this need, the Postgraduate Diploma in Education (PGDE) is prepared as a revised teacher education program, addressing the existing learning needs of diverse students.

The duration of new PGDE program is 18 months, replacing the earlier 12-month one-year B.Ed. Program. Upon completion of theoretical and practical coursework of PGDE programs at the campus, the prospective teachers will engage in a teaching internship at selected schools for a minimum of four months as part of the PGDE Program. This program is crafted to address the professional development requirements of teachers in upper Basic and Secondary Schools, involving prospective teachers in practical activities, and helping them to employ critical and participatory pedagogy, and integrating digital technologies.

The PGDE program aims to provide pedagogical training to individuals holding a bachelor's degree or equivalent, prospective teachers and currently teaching at the basic and secondary levels. The program serves as fundamental teacher training, sensitizing and orienting teachers/prospective teachers to the core aspects of their profession. Emphasis is placed on professional educational practices grounded in foundational disciplines, curriculum, instructional design, and methodology. The program also aims to enhance the specific content skills relevant to teaching within subject areas and to improve the managerial capabilities of administrators in running high-quality educational institutions.

Program goals and objectives

The main goal of PGDE is to produce qualified teachers for schools in Nepal, with professional training and hands-on experience of teaching in schools. With pedagogical skills, the graduates are expected to grow professionally with creativity, imagination and the pursuit of professional and personal development. The goal of the program is to equip graduates with pedagogical knowledge and skills, with expertise of at least two subjects as subject specialist who could cater the learning and assessment needs of students at the school level. This expertise consists of effective strategies for the planning, conducting and evaluating of teaching students of the given school subjects, and plan and conduct continuous and periodic assessment of learning of the students. In addition, the teacher will continuously grow as a professional by doing action research and contributing to school education by both transmitting and producing knowledge.

Objectives

- Make annual, unit and daily plans for teaching and assessment as required by the curriculum.
- Employ efficient strategies to plan, execute, and assess the teaching of designated school subjects.
- Gain comprehensive expertise and competencies necessary for effectively teaching specific subjects.
- Develop curricula and classroom instruction strategies, incorporating diverse methodologies and assessment models that meet predefined standards.
- Integrate suitable teaching methodologies and instructional techniques tailored to the subject matter being taught.
- Utilize acquired knowledge, skills, and ethical values inherent to the teaching profession in real-world teaching scenarios.
- Create and sustain an optimal learning environment within the classroom that fosters student growth and learning.
- Exhibit proficiency in critical thinking skills and engage in reflective practices to enhance teaching methodologies and personal development.
- Demonstrate proficiency in educational administration, showcasing aptitude and expertise in administrative tasks within educational settings.
- Illustrate continuous professional growth by embodying competence, adhering to values, engaging in reflective practices, and conducting self-evaluation.
- Demonstrate proficiency in adapting to the dynamics of school and classroom environments, including adeptness in interpersonal relations, effective communication, and practical knowledge of action research through the successful execution of portfolios, projects, or assignments.
- Plan and execute co- and extracurricular activities within and beyond the school environment.

Program Structure

The Postgraduate Diploma in Education (PGDE) constitutes a rigorous three-semester (18 months) full-time academic program. Graduation from the program necessitates a minimum of 39 credits, including a mandatory teaching internship accounting for 9 credits. In the curriculum, there are five core courses, distributed across three in the first semester and two in the second semester. Additionally, students are required to choose four courses focusing on subject-specific pedagogy—two in the first semester and two in the second semester—aligned with the subjects they pursued during their Bachelor's Degree studies. Furthermore, the second semester offers three elective courses, with students mandated to select only one elective course. Notably, the internship course, valued at 9 credits, is scheduled for the third semester. The structured outline of the Three-Semester PGDE course can be found in Table 1 below.

Table 1: Course Structure of Postgraduate Diploma in Education (PGDE)

Semester	Nature Course	Course Code	Course Title	Credit Hours	Total
First Semester	Core Education Courses	Ed. 461	Educational philosophy and Curriculum development	3	15
		Ed. 462	Social and educational psychology in classroom	3	
	Pedagogy courses	Sp. Ed. 471	Subject A – pedagogy I (Theory +Practical)	2+1	
		Sp. Ed. 471/472	Subject B – Pedagogy I (Theory +Practical)	2+1	
	Applied Course	Ap. Ed. 463	Yoga and Physical Activity for Health Promotion (Theory and Practical)	2+1	
Second Semester	Core Education Courses	Ed. 481	Assessment for learning	3	12
		Ed. 482	Application of Information and Communication Technology (ICT) (Theory +Practical)	2+1	

	Pedagogy courses	Ed. 491	Subject A – Pedagogy II (Theory +Practical)	2+1	
		Ed. 491/492	Subject B – Pedagogy II (Theory +Practical)	2+1	
	Elective courses (Any once course)	El. Ed. 493	Guidance and Counselling	3	3
		El. Edu. 494	Inclusive education and classroom management	3	
		El. Ed 495	Application of arts in education (Theory +Practical)	2+1	
Third Semester	Teaching internship	Ed. 496	Practicum - (lesson plan, micro teaching and teaching students in schools)	3	9
		Ed. 497	Project Work - Material development, testing and Learning Improvement Plan (LIP) (analytical report)	2	
		Ed. 498	Organization of extra/cocurricular activities and school report on inclusive classroom management (Report)	2	
		Ed. 499	Seminar in reflective practice and teacher development	2	

There are five core courses, three in first semester and two in second semester. Student should select and study four courses of subject specific pedagogy (two in first and two in second semester) based on relevant subjects that they studied in their Bachelor's Degree. There are three elective courses in second semester. Students must select only one elective course. Internship course worth 9 credits is in the third semester.

Group Division of Coursess

Courses related to subject specific pedagogy have been divided into three groups. Each student can choose two courses from two groups (one from one group) in the first semester and two courses from two groups (one from one group) in the second semester.

Group A	Group B	Group C
Nepali Education	Mathematics Education	Inclusive Education
English Education	Social Studies Education	Instructional Planning and Management
Economics Education	Geography Education	
Health Education	History Education	
Science Education I	Population Education	
ICT Education	Political Science Education	
	Physical Education	
	Science Education II	

Students shall take the following core courses in the first semester:

i) **Take three core courses in first semester**

Ed. 461 Educational philosophy and Curriculum development

Ed. 462 Social and educational psychology in classroom

Ap. Ed. 463 Yoga and Physical Activity for Health Promotion (Theory and Practical)

ii) **Take subject two courses of subject specific (specialization) pedagogy in the first semester)**

Sp. Ed. 471 Subject A – pedagogy I

Sp. Ed. 471 Subject B – Pedagogy I

iii) Take two courses from same subject areas in science education in the first semester

Sp. Ed. 471 Science pedagogy I

Sp. Ed. 472 Science pedagogy I1

iv) Take two core courses in Semester two

Ed. 481 Assessment for learning

Ed. 482 Application of Information and Communication Technology (ICT)

v) Take in two core courses of subject specific (specialization) pedagogy in the second Semester

Sp. Ed. 491 Subject A – Pedagogy II (Theory +Practical)

Sp. Ed. 491 Subject B – Pedagogy II (Theory +Practical

vi) Take two courses from same subject areas in science education in the second semester

Sp. Ed. 491 Science pedagogy II

Sp. Ed. 492 Science pedagogy IV

vii) Take only course from three elective courses in the second semester

El. Ed. 493 Guidance and Counselling

El. Ed. 494 Inclusive education and classroom management

El. Ed. 495 Application of arts in education

viii) Take teaching internship courses in the third semester.

Teaching internship is an integral part of the PGDE. Course. After completing courses of first and second semester, the students will be sent to the selected school for at least four months with aim to provide them with hands on teaching experiences related to subject specific courses by applying theoretical knowledge and methodological skills learned from first and second semester courses to classroom teaching.

Ed. 496 Practicum - (lesson plan, micro teaching and teaching students in schools)

Ed. 497 Project Work - Material development, testing and Learning Improvement Plan (LIP) (analytical report)

Ed. 498 Organization of extra/cocurricular activities and school report on inclusive classroom management (Report)

Ed. 499 Seminar in reflective practice and teacher development

Eligibility for the Admission

To be eligible for the admissions to PGDE Program, the candidates must have graduation (bachelor's degree) in any disciplines from Tribhuvan University or recognized university. In addition, they need subject specific requirements for the admission in different subject specialization areas which are as follows:

Table 2: Eligibility criteria for the admission to PGDE in different subject areas

S. N.	Subjects offered in PGDE	Students seeking admission to PGDE must have Bachelor's degree in following discipline/subjects
1	Science Education	BSc, BSc. Ag., BSc Forestry, BSc. Environmental Science
2	Math Education	BA Math, BSC Math, BSCCSIT, BCA Computer, Engineering, Civil Engineering
3	English Education	BA with major English
4	Nepali Education	BA with Major Nepali
5	IPM Education	Bachelor's Degree in any Discipline
6	ICT Education	BSc CSIT, BCA, BIT, BIM, Computer Engineering,
7	Economics Education	BA with Economics, BBS/BBA
8	Social Studies Education	BA with History or Economics or Political Science or Geography, Rural Development, Sociology/Anthropology, Social Work, BBS and Bachelor Degree in any discipline with teaching experiences in Social Studies of school
9	History Education	BA with History
10	Geography Education	BA with Geography or Environmental Science

11	Political science Education	BA with Political science or Law
12	Population Education	BA with Population/Demography, Geography, Environmental Studies
13	Health Education	Bachelor of Public Health, Bachelor in Nursing, Bachelor in health-related profession, and Bachelor in sport science, Bachelor in any disciplines with work experiences in health-related fields
14	Physical Education	Sport Science, Bachelor in any subject with training/experience in sports
15	Inclusive Education	Any Subject

Delivery Modes of PGDE Program

The Courses of PGDE Program will be delivered through face-to-face mode and blended mode for instruction and learning.

Face-to-Face Mode of Teaching and Learning

The courses of PGDE will be delivered in traditional face-to-face mode in all constituents and affiliated campuses that have obtained an approval from Faculty of Education, Office of the Dean and Academic Council of Tribhuvan University for running selected courses of PGDE. In this delivery mode, all teaching and learning occurs in a face-to-face context, on the selected campuss.

Blended Mode of Teaching and Learning

A blended mode combines online learning elements such class presentation using MS team and Moodle learning management system, videos and online forums and face-to-face elements such practical activities, project, field work, laboratory sessions, practicum and teaching practices. Blended courses are divided into online learning (off campus) and face-to-face learning components (on campus)

In blended mode, delivery of teaching and learning activities, including communication, learning activities, resources and assessments occurs predominantly online learning mode in virtual class. This may include 10 weeks of online learning.

Face-to-face mode for learning will be held on campus in real classroom or laboratory sessions. On campus activities may include two weeks, one week at the beginning of the semester and another one week at the end of the first and second semester.

Instructional Techniques

The instructional techniques in PGDE program includes several methods and strategies such as class lecture, presentation, group discussion, demonstration, project work, field/school visit, etc. In addition, workshop, seminars, case analysis, problem solving, and inquiry approaches will be used as specific instructional techniques for the effective delivery of courses. Technology integration and digital pedagogy should be applied to teaching learning process for the blended modes of teaching and learning.

Attendance

Students are required to regularly attend all theory and practical classes, assignments, seminars and presentations for both online and face-to-face modes as required by the course. A student is required to attend at least 80 percent of such activities in order to qualify for the semester examination.

Teaching Internship

Teaching Internship/Practicum (TP) is an integral part of the Postgraduate Diploma in Education. It provides opportunities for students to put theory into classroom practice. It takes place in school classroom of grade 6-10. Students are required to complete a 12-week (Four weeks on campus and 9-10 weeks in the assigned schools) in the third semester under the Faculty/subject teacher' internship supervisor. Micro-teaching practice will be conducted by the concerned Department in their campus. Students who are enrolled in the blended mode will participate in micro-teaching practice through online learning under supervision of the subject teacher for weeks and must engage in real classroom teachings of the selected schools. During period 9-10 week of the internship, each student is required to complete teaching practicum, project work, and conduct extracurricular activities in schools. The intern supervisors will assess

the performance of students teaching practice through formative and summative assessment, taking into consideration students' professional behaviour and attitude.

Evaluation Scheme

The evaluation scheme includes internal evaluation and external evaluation. The internal evaluation and external evaluation carry respectively 40% and 60% of the total weightage (unless stated otherwise in detailed course contents of some courses). The students must pass separately in both types of evaluation. The external evaluation will be conducted by the Examination Section, Office of the Dean, Faculty of Education through a final written examination at the end of the semester. Besides core theoritical core courses of 3 credits, every practical based core course and specialization course contains 2 credit theretical and 1 credit practical activities. The evaluation of theoritical and practical activities would be separate and needs to be paased separately and total marks secured in theoritical and practical activities would be added within the same full marks then considered for the result.

Make up/Retake Exam

Make up/Retake examination will be conducted as per the semester guideline 2074 and decisions of Academic Council of Tribhuvan University.

Grading System

The final evaluation of students is done through the examination conducted by Tribhuvan University. The performance of a student will be indicated on a four -point scale ranging from 0 to 4. The passing grade of an individual paper for the semester-end examination will be grade "B minus" or GPA of 2.7 (55%). Students must secure a minimum of grade 'B-' or Grade Point Average (GPA) of 2.70 in the internal evaluation in order to qualify to appear in the semester examination. In order to pass the semester examination, the student must secure a minimum of grade 'B-'or the Cumulative Grade Point Average (CGPA) of 2.70. The overall grade of a student will be determined by the student's performance indicated by the in-semester and semester-end examinations. The Letter Grade, GPA, percentage equivalent and performance remarks for the PGDE program are presented in Table 3.

Table 3: Grading System

Letter Grade	GP	SGPA / CGPA Range	Percentage Equivalent	Remarks
A	4	4	90 & above	(Distinction) Outstanding
A-	3.7	3.70 to 3.99	80-89.9	(First Division) Excellent
B+	3.3	3.30 to 3.69	70-79.9	(First Division) Very Good
B	3.0	3.00 to 3.29	60-69.9	(Second Division) Good
B-	2.7	2.70 to 2.99	50-59.9	(Third Division) Satisfactory
F	0	Below 2.70	Below 50	Fail

Note: GP: Grade Point, SGPA: Semester Grade Point Average, CGPA: Cumulative Grade Point Average

Graduation/Award of Degree

The students completing all the requirements for the degree will be awarded a degree of "Postgraduate Diploma in Education".

Ed. 461: Educational Philosophy and Curriculum Development

Course No.: Ed. 461 **Nature of Course:** Theoretical

Level: Post-Graduate in Education (PGDE) **Credit hours:** 3

Semester: First **Total teaching hours:** 48

1. Course Description

This is a core pedagogical course designed for the Postgraduate Diploma in Education to develop general understanding and competencies of prospective teachers on educational philosophy and curriculum development process. This course provides understanding on philosophy from eastern and western perspectives, including their linkage with different aspects of education. The course also emphasizes on basic understanding of curriculum and provides curriculum development skills including the process of designing local curriculum. The course encourages prospective teachers to use curriculum and teacher's guide to conduct instructional process accordingly.

2. General objectives

The main aim of the course is to widen the horizon of the knowledge, skills, and attitude of prospective teachers to critically assess and identify philosophical bases of education and curriculum development processes. In addition, the course intends to equip them with required knowledge and skills to be committed educators. At the end of the semester, this course aims to:

- Develop a clear perspective of the notions, aims, modes, structures and policy provisions of education among prospective teachers and help them draw educational implications in the context of Nepali education system.
- Enable the prospective teachers to relate education and philosophy, and acquaint them with Vedic philosophy, Buddhism, perennialism, progressivism and re-constructionism with their educational implications in Nepali contexts.
- Familiarize the prospective teachers with the relationship between society and education and role of education in promoting social inclusion in Nepal.

- To broaden prospective teachers' knowledge and understanding of the concept, importance, design and structure of curriculum and motivate them to use curriculum and teacher's guide to maximize students' learning.
- To enable the prospective teachers to play a leading role in developing, disseminating, and implementing the curriculum effectively.

3. Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

<table>
<tr><th colspan="2">Unit I: Introduction to Education (8 hours)</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>- Analyze the concept of education from multiple perspectives.
- Illustrate different aims of education.
- Draw implications of different modes of education in Nepali contexts.
- Familiarize themselves with education system of Nepal
- Critically examine policy provisions and plans of school education.</td><td>1. Concept of education (Eastern and western perspectives)
2. Aims of education (Individual, social, national, and international)
3. Modes of education (Formal, non-formal, informal/lifelong)
4. Education in Nepal
4.1 National goals and structure of education
4.2 Policy provisions and plans of school education (constitution, latest rule and regulation of education, education in latest five years plan, National Education Policy 2076 and Nepal School Education Sector Plan SESP 2021-30).</td></tr>
<tr><th>Activities</th><th>Pedagogical implications</th></tr>
<tr><td>- Facilitator will provide learning resources to the prospective teachers ahead of the class, and ask them to review the</td><td>- Use good practices of eastern and western education (e.g. ethics – eastern, critical thinking – western)</td></tr>
</table>

resources and present their critical understanding in the class. - Facilitator will deliver the contents by using Power Point, followed by question-answer and group discussion method focusing on the application of the contents in school education. - Prospective teachers will take part in class presentation on the given subject matter and critically assess the class presented by their peers. - Facilitator will evaluate the class presentation and provides feedback for further improvements.	- Employ/use knowledge, values and skills from different modes of education and encourages students to learn through non-formal and informal modes (non-formal – computer training, informal – internet, family members, mass media). - Apply the policies and plans in their professional activities (e.g. instructional planning, resource management, collaboration with parents and local government).

Resources

Curriculum Development Center (2019). *National curriculum framework for school education in Nepal.* Bhaktapur.

Ministry of Education, Science and Technology (2021). *Nepal School Education Sector Plan SESP 2021-30).* Government of Nepal.

Nepal National Planning Commission (2020). *The Fifteenth Plan (Fiscal Year 2019/20 – 2023/24).* Government of Nepal National Planning Commission Singhadurbar.

Aggarwal, J. C. (1997). *Principles, methods and techniques of teaching*. Vikas Publishing House.

Dash, B. N. (1995). *Foundations of education thought and practice*. Kalyani Publication.

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Unit II. Philosophy and Education (10 hours)	
- Clarify the meaning and scope of	2.1. Concept and scope of philosophy (From

philosophy from eastern and western perspectives. - Identify the relationship between education and philosophy. - Introduce Vedic philosophy. - Analyze educational aspect of Yoga and Vedanta philosophies with their educational implications. - Use Vedic pedagogy (Shravana, Manana and Nididhyasana) in the teaching-learning process. - Introduce Buddhism and draw implication of Panchashila for teaching-learning process. - Draw educational implications of progressivism, and re-constructionism. - Critically reflect the professional values and ethics of a teacher.	eastern and western perspectives) 2.2. Relationship between education and philosophy 2.3. Vedic philosophies (general introduction of Vedic philosophy, educational aspect of Yoga and Vedanta philosophy) 2.4. Vedic pedagogy: Shravana, Manana and Nididhyasana 2.5. Buddhism (general introduction) and educational implications (importance of Panchashila in learning). 2.6. Western Philosophies (progressivism and re-constructionism: general introduction and educational implications: aims of education, learning contents, methods, teacher and students' role) 2.7. Teachers' professional values and ethics (from eastern and western perspectives)
Activities	**Pedagogical implications**
- Prospective teachers will search and study the learning resources available in the library and Internet. - Prospective teachers will engage in class presentation on the scheduled content area. - Facilitator will apply cooperative learning methods (e.g. group work, Jigsaw) to engage prospective teachers in	- Recognize the notion of “teacher as a philosopher”. Select appropriate pedagogies based on their personal teaching philosophy. - Select pedagogical strategies from the eastern and western educational philosophies and apply them in their classrooms (e.g. Shravana, Manana and Nididhyasana in teaching – eastern, ICT-

different learning activities. - Prospective teachers will engage in critical analysis of philosophy and search implication in professional/ educational settings. - Prospective teachers conduct a panel discussion on the professional values and ethics of a teacher. - Prospective teachers will review books or book chapters or journal articles related to the content and prepare a summary report. - The review report will be presented in the class. They will finalize the report based on the feedback from peers and the facilitator (first assignment).	based programmed instruction – western). - Use 'Panchashila' principles to make students self-disciplined and encourage them to become self-motivated learners. - Use pedagogical strategies of progressivism and re-constructionism in the classroom. - Develop self-professional ethics and values and employ them in them professional lives.

Resources

Kneller, G. F. (1971). *Foundations of education*. John Wiley & Sons.

Ozmon, H. A., & Craver, A. M. (1999). *Philosophical foundations of education*. Prentice-Hall.

King, R. (1999). *Indian philosophy: An introduction to Hindu and Buddhist thought*. Ane Books.

Leaman, O. (2011). *Eastern philosophy: Key readings.* Routledge.

Thompson, M. (2011). *Teach yourself eastern philosophy*. Papermill eBooks. Retrieved from www.philosophyandethics.com

Saxena, N. R. (2003). *Principles of education*. Surya Publication.

घिमिरे, जनार्दन र कोइराला विद्यानाथ (२०७८)। उपनिषदीय त्रि-आयामिक चिन्तन: अनुसन्धानात्मक विश्लेषण

।सनलाइट पब्लिकेसन ।

Unit III. Society and Education (7 hours)	
- Identify the relationship between society and education. - Examine the nature of right-based approach to education with reference to Nepal. - Analyze the role of education from a critical perspective. - Assess the influence of different social factors on education. - Identify the role of education as a vehicle of social inclusion in Nepal.	3.1. Relationship between society and education 3.2. Inclusive approach to education (human rights, child rights, women rights, and rights of persons with disabilities in Nepal) 3.3. Education: Commodity or service; equalizer or divider 3.4. Social factors (Issues) in education (Language, social class, gender, ethnicity, religion). 3.5. Education and social inclusion
Activities	**Pedagogical implications**
- Prospective teachers will discuss the relationship between society and education in groups and share their findings in the class. - Prospective teachers will review materials related to human rights, child rights, women's rights, and rights of persons with disabilities and share their understanding in the class using innovative methods (e.g., PowerPoint presentation, Gallery walk). The facilitator will conclude the session by summing up the ideas shared by prospective teachers. - The class will be divided into groups of 4	- Design and implement educational program (e.g., bilingual teaching, instructional design for students with disabilities) by considering students'/social needs and aspirations. - Translate the concepts of human rights, child rights, women rights, and rights of the persons with disabilities in and out of classroom (e.g., classroom management, extracurricular activities, community involvement in school activities) - Apply the principle of equity strategies in classroom practices (e.g., providing additional time for students with disabilities).

to 5 members and two issues will be given to each group for discussion. The issues are: Education should be conceptualized as commodity or service, and Education is equalizer or divider). Each group will present their arguments for and against each of the given issues. - The same groups will be asked to discuss the following question: what are the socio-cultural factors influencing education in Nepal? The group will share the findings of their discussions. Finally, the facilitator will summarize the factors through PPT presentation. - Reading materials about 'social inclusion and education' will be provided to the prospective teachers and then ask them to reflect their understanding how the education plays the role in promoting social inclusion in Nepal.	- Plan and implement the pedagogical activities assessing socio-cultural factors of students.

Resources

Koirala, M. P. (2013). Nepalma shikshya adhikar: Samasya ra samadhan (in Nepali). *Smart Vision: A Journal of Educational Research, 1*,131-136.

Saha, Lawrence J. (2008). *Sociology of education. 21st century education: A reference handbook.* Sage.

नेपाल सरकार (२०७२), *नेपालको संविधान,* कानून किताब विकास समिति ।

नेपाल सरकार (२०७४), *शिक्षा ऐन २०२८,* कानून किताब विकास समिति ।

नेपाल सरकार (२०७४), अपाङ्गता भएका व्यक्तिको अधिकार सम्बन्धी ऐन २०७४, कानून किताब विकास समिति ।

नेपाल सरकार (२०७५),बालबालिका सम्बन्धी ऐन २०७५, कानून किताब विकास समिति .

नेपाल सरकार (२०७५), *अनिवार्य तथा निःशुल्क शिक्षा सम्बन्धी ऐन २०७५,* कानून किताब विकास समिति ।

नेपाल सरकार (२०७७), *अनिवार्य तथा निःशुल्क शिक्षा सम्बन्धी नियमावली २०७७,* कानून किताब विकास समिति ।

Unit IV. Understanding Curriculum (12 hours)	
- Explain the meaning (narrower and wider) and importance of curriculum. - Introduce the meaning and components of curriculum design. - Explain models of curriculum design - Distinguish subject-centered, learner-centered, and problem-centered designs with examples. - Explain the overall structure of school level curriculum in Nepal. - Draw instructional activities in the class from the curriculum and teacher's guide published by Curriculum Development Center.	4.1. Concept and importance of curriculum 4.2. Models of curriculum design (Hilda Taba's and Wheeler's model) 4.3. Curriculum designs 4.2.1 Concept and components 4.2.2 Subject-centered design 4.2.3 Learner-centered design 4.2.4 Problem-centered design 4.4. Structure of school level curriculum in Nepal 4.5. Use of curriculum and teacher's guide in teaching learning process
Activities	Pedagogical implications
- Prospective teachers will get access to authentic reading materials (related to the concepts of curriculum and its importance) provided by facilitator, consult these materials thoroughly, and share their understanding in the class by following the role assigned by facilitator. - A reading material related to curriculum designs will be provided to prospective	- Assess the curriculum they use from the lens of narrow and wider perspectives and carry out instructional activities accordingly. - Plan and implement the curriculum (instructional and assessment activities) based on the particular curricular design. - Select and apply instructional activities following the curriculum and teacher's

teachers before the class. The facilitator will ask the prospective teachers to share the basic tenets of subject-centered, learner-centered, and problem-centered. Then, the facilitator will note them down in a table/matrix and present them in the class. Finally, the facilitator will provide additional clarification of the content if required. - The facilitator will share the structure of school level curriculum through PowerPoint presentation. - The class will be divided into five groups. The groups will be asked to identify the uses of curriculum and teacher's guide in instructional process.	guide to optimize the students' learning.

Resources

Curriculum Development Center (2019). *National curriculum framework for school education in Nepal.* Bhaktapur.

Kelly, A.V. (1999). *The curriculum: Theory and practice.* Paul Chapman Publishing Limited.

Marsh C. J., & Willis, G. (1999). *Curriculum: Alternative approaches, ongoing issues.* Prentice Hall, Inc.

Ornstein, A. C., & Hunkins, F. P. (2018). *Curriculum: Foundations, principles, and issues* (7th ed.). Pearson Education.

Unit V. Curriculum Development, Dissemination and Implementation in Nepal (12 hours)	
- Explain school-level curriculum development processes in Nepal. - Identify major challenges of curriculum	5.1 Curriculum development process in Nepal 5.2 Challenges of curriculum development

development in Nepal. - Describe curriculum dissemination process in Nepal. - Identify the key factors to be considered while implementing a curriculum. - Review and explain the local curriculum development policies and practices in Nepal.	in Nepal 5.3 Curriculum dissemination process in Nepal 5.4 Guidelines for implementing the Curriculum 5.5 Policy and practice of local curriculum in Nepal
Activities	**Pedagogical implications**
- Prospective teachers will consult a reading material (Curriculum development guidelines of CDC) associated with curriculum development process in Nepal and share their understanding in the class. - Working in a collaborative group, prospective teachers will explore major challenges of curriculum development in Nepal and present the results in the class. The facilitator will provide feedback on their presentations. - Prospective teachers will consult a reading material related to curriculum dissemination, discuss their individual understanding in groups, and share common conclusion in the class. - The facilitator will share key factors to be considered while implementing curriculum in the class through PPT presentation. - Prospective teachers consult a reading	- Collaborate with students, teachers and parents to prepare a local curriculum for learning purpose. - Assist local government to develop, disseminate and implement a local curriculum. - Analyze the local curriculum and provide feedback to the local government for further improvement. - Communicate the structure, contents and implementation process of curriculum with local stakeholders and seek the supports required from these groups. -

material related to local curriculum policy and share their understanding among the peers.	

Resources

Curriculum Development Center (2019). *National curriculum framework for school education in Nepal.* Bhaktapur.

Ornstein, A. C., & Hunkins, F. P. (2018). *Curriculum: Foundations, principles, and issues* (7th edition). Pearson Education.

Print, M. (1993). *Curriculum development and design.* Allen and Unwin.

4. Evaluation criteria

Criteria	Marks	Remarks
Internal criteria (40%)		
Attendance (80% compulsory)	5	A score (3, 4 or 5) will be provided to students based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)
Class presentation	5	Each prospective teacher will present a task with the supervision of the facilitator.
Review work (first assignment)*	10	Each student will review a book/book chapter/ article and prepare review report in about 1500 words.
Paper writing (second assignment)**	10	Each student will write a reflective paper of 1500 words.
End-semester exam (third assignment)	10	A test of 20 full marks will be taken with following items: Objective - 10 (weightage of

		each item will 0.5 marks), 3 subjective items (creative type) - 15 (3 marks of each item). The obtained score will be halved to covert to the full mark of 10.
Total	40	
External criteria (60%) External Examination	60	Group A: Objective items (10× 1) = 10 Group B: Short answer type items (6× 5) = 30 Two questions will be added for choice (given in 'or') Group C: Essay type items (10× 2) = 20 One question will be added for choice (given in 'or')

Ed. 462: Social and Educational Psychology in Classroom

Course No.: Ed. 462	**Nature of Course:** Theoretical
Level: Postgraduate (PGDE) in Education	**Credit hours:** 3
Semester: First	**Total teaching hours:** 48

1. Course Description

This course is prescribed as a compulsory course for the three-semester postgraduate diploma in education (PGDE) students under the faculty of education at TU. The course subsumes four units focusing on theoretical and applied aspects of social and educational psychology in light of classroom implications. It focuses on the concept, understanding, analysis and application of social and educational psychology, as well as its importance for teachers from a pedagogical standpoint. The course aims to provide students with professional knowledge, skills, and understanding about developmental psychology and learning theories and their educational implications.

2. General objectives

The main aim of the course is to widen the horizons of the knowledge, skills, and attitude of prospective teachers to critically assess and identify social and educational psychology in the classroom. In addition, the course intends to equip them with the required knowledge and skills to be committed educators. At the end of the semester, this course aims to:

- To help the students generalize the concepts of psychology, social psychology and educational psychology.
- To provide students with basic understanding of sociocultural factors, individual difference, motivation and information processing with regards to learning
- To help students enumerate the significant facts of human development and understand the concept and difference between growth and development.
- To assist the students to analyze influence of human development on children's learning

- To provide students with basic understanding of the developmental stages of children from conception to the age of childhood and develop an understanding of the characteristics, criteria and various aspects of early childhood, late childhood, puberty and adolescence stages.
- To enable students to describe different learning theories and apply concepts of learning theories in teaching and learning process.
- To equip students with basic knowledge and skills of guidance and counselling knowledge that are applicable to school education.

3. Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

Unit I Concept of Social and Educational Psychology 12 Hours	
Specific Objectives	**Content**
- Describe the concept of psychology, social and educational psychology - Compare the growth and development - Conceptualize the issues in human development - Explain the social and cultural context of human development - Identify socio-cultural factors that influence learning of children - Discuss individual difference in intelligence, personality, thinking and learning styles. - Describe theories and practice of motivation in classroom teaching an learning - Discuss how individual differences in the ability of information process affect learning	1.1 Basic Concepts of psychology, social and educational psychology 1.2 Importance of social and educational psychology in teaching and learning 1.3 Concept of growth and development 1.4 Issues in human development and learning (nature vs nurture and continuity vs discontinuity) 1.5 Social context of human development and learning (families, peers, schools) 1.6 Socio-cultural factors in learning process 1.7 Individual variations (intelligence, thinking and learning styles, personality) 1.8 Motivation in teaching and learning

<table>
<tr><td>and educational achievement of students</td><td>(theories and practice in classroom)
1.9 Information processing approach (mechanism, capacity of information processing, attention, memory, metacognition)</td></tr>
<tr><td>Activities</td><td>Pedagogical implications</td></tr>
<tr><td>- Facilitator will provide learning resources to the prospective teachers ahead of the class, and ask them to review the resources and present their application of psychological knowledge in the classroom.
- Organize group discussion and provide feedback for issues-based teaching and learning to the prospective teacher.
- Prepare a short note on the perspectives of educational psychology of secondary school teachers by visiting nearby schools.
- Organized the class personation at the end of unit by a prospective teacher for interactive class.</td><td>- Apply the psychological concept in the classroom teaching
- Consider individual differences of learners regarding human growth and development while designing instructional planning and facilitating students' learning in school.
- Identify and use the different issues of human development in the classroom.
- Prospective teachers will consider individual difference in intelligence, personality, thinking and learning styles in teaching and learning process
- Prospective teachers consider families, peers and social-cultural factors while engaging students in learning</td></tr>
<tr><td colspan="2">Resources
• Glassman, W. E. & Haded, M. (2009). Approaches to Psychology (5th ed.). Tata McGraw Hill Publishing Company.
• Hurlock, E. B. (2002). Developmental psychology: A life-span approach. Tata McGraw Hill Publishing Company.
• Santrock J.W. (2011) Educational Psychology, (IV ed.). Tata McGraw-Hill Publishing Company Limited.
• Santrock J.W. (2011). Lifespan development (14th ed.). Tata McGraw-Hill Publishing</td></tr>
</table>

Company Limited.

- Sigelman, C. K. & Rider, E. A. (2018). *Life-span human development.* Cengage learning.
- Wong, D. W., Hall, K. R., Justice, C. A. & Hernadez, L. W. (2015). *Counselling individuals through the lifespan.* Sage.
- Woolfolk, A. (2008). *Educational psychology*. India: Pearson Education.

Unit II Stages of Human Development 12 Hours

- Explain the concept of human development and developmental psychology - Describe classroom implication of behavioural theory, cognitive theory and Erikson theory - Discuss different methods and approach to educational research on human development - List out the different stages of human development. - Describe various aspect during the early childhood - Explore various aspect during the late childhood - Clarify various aspect during the puberty - Describe various aspect during the adolescence	2.1. Concept of human development and developmental psychology 2.2.Theories of human development 1.5.2 Behavioural theory 1.5.3 Cognitive theory 1.5.4 Erikson Theory 2.3.Research on human development 1.6.1 Longitudinal 1.6.2 Cross-sectional 1.6.3 Case study methods 2.4.Stages of human development (Prenatal and postnatal period) 2.5.Postnatal period 2.3.1 Childhood (Early and late) (Characteristics, developmental task, physical, social, emotional development, hazards) 2.3.2 Puberty (Characteristics, causes, criteria, age, growth spurt, effects, sources of

	concern, unhappiness, hazards) 2.6.Adolescence 2.4.1 Physical and cognitive development in adolescence (Nature of adolescence, Physical changes, Issues in adolescent health, Adolescence cognition) 2.4.2 Socioemotional development in adolescence (Self, identity and religious/spiritual development, Families, peers, culture and adolescent problems)
Activities	**Pedagogical implications**
- Facilitator provides learning resources such as papers, books, video/URL link, recorded video, and PowerPoint slides - Provides discussion questions/themes/issues for group discussion and provides feedback to the students. - Engage in group discussion on relevant subject matter in the classroom. - Students class presentation 10 minutes for each student on the given topic - The prospective teacher makes class personation at the end of the unit for interactive class and facilitators provide feedback for the improvement of class presentation.	● Prospective teachers realize developmental psychology and various stages of human development and improve their teaching activities in the classroom. ● Prospective utilize insights gained from human development theories and research on human development in classroom teaching ● Perspective teachers behave on the basis of childhood, puberty and adolescence (e. g. characteristics, physical change ……) ● Perspective teachers know and realise the sensitivity of adolescence and are easy to treat in the

	classroom.

- **Resources**

- Hurlock, E.B. (2002). *Developmental psychology: A life-span approach*. Tata McGraw Hill.
- Lines, D. (2006). *Brief counselling in schools working with young people from 11-18 (2ed).* Sage.
- Stenberg, L. (2017). *Adolescence (7th ed.).* McGraw-Hill Education.
- Santrock, J.W. (2007) *Adolescence, (11th ed.).* Tata McGraw-Hill Publishing Company Limited.
- Santrock, J.W. (2011). *Lifespan development (14th ed.).* Tata McGraw-Hill Publishing Company Limited.
- Sigelman, C.K. & Rider E.A. (2012). *Lifespan human development, (7th ed.).* Wadsworth, Cengage Learning.

Unit III: Different Learning Theories	**16 Hours**
- Explain different learning theories with reference to concept, contributor and characteristics. - Elaborate the educational implications and critiques of different learning theories. - Differentiate between behaviourism, cognitivism, constructivism and connectivism learning theories**.** - Explain the applications of behaviorism, cognitivism and constructivism in classroom	3.1 Behaviourism: Brief introduction, contributors, characteristics, classroom/educational implications and critiques 3.2 Cognitivism: Brief introduction, contributors, characteristics, educational implications and critiques 3.3 Constructivism: Brief introduction, contributors, characteristics, classroom/

<table>
<tr><td>instruction of schools.</td><td>educational implications and critiques

3.4 Connectivism: Brief introduction, contributors, characteristics, classroom/educational implications and critiques</td></tr>
<tr><td>Activities</td><td>Pedagogical implications</td></tr>
<tr><td>- Facilitator provides learning resources such as papers, books, video/URL link, recorded video, and PowerPoint slides

- Make four groups for group work and provide different learning theories as issues (behaviourism, cognitivism, constructivism and connectivism).

- Organize the class personation on the basis of their reports.</td><td>- Perspective teacher access to identify the behaviour and develop the strategies for changing behaviour of their children
- Perspective teachers use cognitivism learning theory for problem solving, decision making etc.
- Perspective teachers make a classroom interactive and constructive by using Piaget's Individual construction and Vygotsky's Social constructivism.
- Perspective teachers connect ICTs to the knowledge and skill of their students.</td></tr>
<tr><td colspan="2">Resources
• Hergenhahn, B. R. & Olson, M. N. (2001). An introduction to the theory of learning (8th ed.). PHI Learning Private Limited.
• Hergenhahn, B.R. & Henley, T. B. (2014). An introduction to the history of psychology (7th ed.). Wadsworth Cengage learning.
• King, D. B. Woody, W.D. & Viney, W. (2013). History of psychology ideas & context (5th ed.). Pearson Education, Inc.
• Linda, H. (2012). Learning theory and online technologies. Routledge
• Lines, D. (2006). Brief counselling in schools working with young people from 11-18 (2ed). Sage Publication.</td></tr>
</table>

- Stephen, D. (2012). *Connectivism and connective knowledge: Essays on meaning and learning networks.* National Research Council.
- Schunk, H.D. (1996). *Learning theories*. Prentice-Hall.

Unit IV: Educational Guidance, Counselling and Complex Cognitive Knowledge

8 Hours

- Clarify the concept and process of guidance and counselling. - Describe the types and techniques of guidance and counselling - Explore the role of spirituality in guidance and counselling - Explain the meaning and promoting concept formation - Discuss the concept of thinking, reasoning, critical thinking, decision making and creative thinking - Explore the steps and obstacles in problem solving	4.1 Concept of guidance and counselling 4.2 Process of guidance and counselling 4.3 Types and techniques of guidance and counselling 4.4 Spirituality in counselling 4.4.1 Eastern religious 4.4.2 Western religious 4.5 Concept 4.5.1 Meaning and concept of concept, promoting concept formation. 4.6 Thinking 4.6.1 Meaning of thinking, reasoning, critical thinking, decision making and creative thinking 4.7 Problem solving 4.7.1 Steps in problem solving, obstacles in problem solving 4.7.2 Problem based learning and project-based learning
Activities	**Pedagogical implications**
- Facilitator provides learning resources such as papers, books, video/URL link, recorded video, and PowerPoint slides	- Perspective teachers find out the needy students of guidance and counselling service and provide proper guiding and

- Facilitators form different groups of prospective teachers in the classroom and allow students to visit nearby schools to study their guidance and counselling practices in school. - The Prospective teacher group conducts the presentation on guidance and counselling services provided in the schools. - Facilitators use the same group of Perspective teachers and provide concept, thinking and problem solving and to carry out short reports for their presentation. - Facilitators provide the feedback on the basis of relevance and gap in accordance with the presentation.	counselling service. - Perspective teachers use concept formation, thinking and problem-solving processes and techniques for their children in the classroom.

Resources

- Feltham, C., Hanley, T. & Winter, L. A. (2017). *The sage handbook of counselling and psychotherapy*. Sage
- John, M. (2013). *An introduction to counselling*. McGraw- Hill Education.
- Myrick, R. D. (2011). *Developmental guidance and counselling: A practical approach (5th ed.).* Educational Media Corporation.

4. Evaluation criteria

Criteria	**Marks**	**Remarks**
Internal criteria (40%)		
Attendance (80% compulsory)	5	A score (3, 4 or 5) will be provided to students based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)

Class presentation	5	Each prospective teacher will present a task with the supervision of the facilitator.
Review work (first assignment) *	10	Each student will review a book/book chapter/ article and prepare review report in about 1500 words.
Paper writing (second assignment) **	10	Each student will write a reflective paper of 1500 words.
End-semester exam (third assignment)	10	A test of 20 full marks will be taken with following items: Objective - 10 (weightage of each item will 0.5 marks), 3 subjective items (creative type) - 15 (3 marks of each item). The obtained score will be halved to covert to the full mark of 10.
Total	40	
External criteria (60%) External Examination	60	Group A: Objective items (10× 1) = 10 Group B: Short answer type items (6× 5) = 30 Two questions will be added for choice (given in 'or') Group C: Essay type items (10× 2) = 20 One question will be added for choice (given in 'or')

Ap. Ed. 463: Yoga and Physical Activity for Health Promotion

Level: Postgraduate Diploma in Education (PGDE)

Semester: First **Course Code**: Ap. Ed. 553

Nature of Course: Applied **Credit Hour**: 3 (2 Th. +1 Pr.)

Teaching Hour: 32 Th. + 32 Pr. = 64

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1. Course Description

This is an applied pedagogical course designed for the Postgraduate Diploma in Education to develop critical understanding and competencies on health, Yoga, and physical education among the prospective teachers. This course is divided into two parts: theoretical and practical. The theoretical part of this course intends to provide basic understanding on the concepts of health, health education, physical education, human body system, disease, food and nutrition, hygiene, and community health. The second part of this course offers firsthand practical experiences of Yoga, Pranayam, meditation, athletics, ball games, racket games, along with officiating skills and techniques among the prospective teachers.

2. General Objectives

The main aim of the course is to develop health conscious physically fit, mentally alert, socially adjustable, and spiritually connected prospective schoolteachers. In addition, this course intends to achieve following general objectives:

- Develop clear understanding of basic concept of health, yoga, and physical fitness and help them develop healthy lifestyle for health promotion and fitness.
- Familiarize the prospective teachers with human body system and diseases and enable them to apply preventive measures against communicable and non-communicable diseases.
- Develop prospective teachers' knowledge and understanding on nutrition, hygiene, and community health.
- Enable the prospective teachers to demonstrate yoga asana, pranayam, and meditation practice for health promotion in classroom learning.

- Enable prospective teachers to involve in athletics, ball games, racket games and also empower them to prepare physical facilities of different games as specified in the course.

3. Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

<table>
<tr><th colspan="2">Unit I: Introduction to Health, Yoga and Physical Education (10)</th></tr>
<tr><th>Specific Objectives</th><th>Course Contents</th></tr>
<tr><td>• Describe the meaning of health, Yoga, and physical activity and exercise.
• Outline the concept, aims, and importance of health education and physical education.
• Describe the interrelationship among health, Yoga and physical activity.
• Explain biological, behavioural, environmental, socio-cultural, economic, and political determinants of health.
• Review the status of health and physical education and yoga curricula in Nepal.
• Discuss relationship between health literacy and health promotion.
• Elucidate the role of physical activity and exercise (morning walk, hiking, sports) for health promotion.
• Explain the role of Yoga and meditation for mental health and physical fitness.</td><td>1.1 Concept of health, Yoga, and physical activity and exercise
1.2 Determinants of health
1.3 Concept, aims, and importance of health education and physical education
1.4 Interrelationship among health, yoga, and physical activity
1.5 Status of Health and Physical Education and Yoga curricula in school education
1.6 Relationship between health literacy and health promotion
1.7 Physical activity and exercise for healthy lifestyle and physical fitness
1.8 Yoga and meditation for mental health and physical fitness</td></tr>
<tr><th>Activities</th><th>Pedagogical Implication</th></tr>
<tr><td>• The teacher facilitator will arrange the tutorial class related to the concept of health, yoga and physical activity and exercise and collect critical understanding from prospective teachers.
• The teacher facilitator will provide learning materials related to concept and importance of health education and physical education and arrange discussion session with prospective teachers.</td><td>• Recognize the qualities of healthy people and apply in daily life.
• Use health as a resource for developing healthy behaviors to attain quality of life.
• Apply pedagogical strategies to teach various contents of health, Yoga, and physical education.</td></tr>
</table>

• The teacher facilitator will arrange the tutorial class of interrelationship among health, yoga, and physical education. • Prospective teachers will be divided into groups. The teacher facilitator will provide reading materials related to the determinants of health to each group. Each group member will review the reading materials and discuss in the group. They will share their learning in classroom through PowerPoints presentation or using chart papers. • Prospective teachers will engage in review of the health education, physical education, and yoga curricula and present in the classroom. • The teacher facilitator will arrange the tutorial class related to the relationship between health literacy and health promotion, followed by discussion. • Arrange panel discussion in the class so that each panel will share their understanding of morning walk, hiking, sports, and Yoga for health promotion and fitness. Panelist could be either prospective teachers or invitees. • The teacher facilitator will provide learning resources for prospective teachers related to the role of yoga and meditation for mental health and physical fitness and ask them share their reflection.	• Communicate aims, objectives and importance of health and physical education. • Involve in physical activity and exercise for healthy lifestyle. • Critically analyze current situation of health and physical education and yoga in Nepal. • Integrate Yoga and meditation practice in classroom teaching.

- **Resources**

- Baruwal, H. B. (2014). *History of physical education and sports*. Kathmandu: Pinnacal publication.
- Baruwal, H. B., Shrestha, S., Datta, B. M. T., Shrestha, M. K. & Poudel, T. (2019). *Foundation of physical education*. Kathmandu: Pinnacle publication, Putalisadak, Nepal.
- Bucher, C. A. (1979). *Foundations of physical education.* London: The C.V. mosby company, pp 54-67.
- Budhathoki, C. B., Wagle, B. & Shrestha, M. K (2019). *Health and physical education*. Kathmandu: Pinnacle Publication.

- Cottrell, R. R., Girvana, J. T. & McKenzie, J. F. (2006). *Principles and foundations of health promotion and education (3rd ed.).* San Francisco: Person Education, Inc.
- Finney, S. (2009). *The Yoga Handbook*. The Rosen Publishing Group, Inc.
- Haskell, W. L., Montoye, H. J., & Orenstein, D. (1985). *Physical activity and exercise to achieve health-related physical fitness components.* Public Health Reports, 100(2), 202-212.
- Johonson, B. & Nelson. J. K. (1988). *Practical measurement for evaluation in physical education.* Delhi: Surjeet publication, 7- K, Kolhapur Road.
- Maharjan, R. K. & Adhikari, P. (2014). *Foundation of physical education*. Kathmandu: Sunlight Publication.
- Naidoo, J. & Wills, J. (2016). *Foundations for health promotion*. London: Elsevier
- Pradhan, H.B. (2016). *A textbook of health education: Philosophy and principles*. Kathmandu: Educational Publishing House.
- Ramchandran, L. & Dharmalingan, T. (2013). *Health education: A new approach*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Rubinson, L. & Wesley, F.A. (1984). *Health education: Foundation for the future*. St. Louis: Times Morro/Mosby College Publishing.
- Sherchan, L. & Upreti, Y.R. (2077 BS). *Health and physical education (in Nepali).* Kathmandu: Quest Publication.
- Sherchan, L. (2019). *Foundation of Physical education. Kathmandu: Quest Publication.*
- Shroff, F. M., & Asgarpour, M. (2017). *Yoga and mental health*: A review. Physiotherapy Rehabil, 2(132), 2573-0312.
- World Health Organization. (2018). Global recommendations on physical education for health. *https://www.who.int/news-room/fact-sheets/detail/physical-activity*.

Unit Two: Human Body and Diseases **(14)**

Specific Objectives	**Contents**
• Outline the meaning and functions of cell, tissue, and sense organs. • Familiarize with the human body system and their functions. • Compare and contrast the meaning of disease, sickness, and illness.	2.1 Introduction to human body system 2.2 Functions of cell, tissue, and sense organs 2.3 Introduction and basic functions of human body systems • Musculo-skeleton efficiency • Cardiovascular efficiency

<table>
<tr>
<td>

Explain mode of transmission and preventive measures of airborne, waterborne, foodborne, fecal borne, insect borne diseases, and sexually transmitted infections.
Discuss risk factors of noncommunicable disease, particularly to hypertension, cancer, and diabetes.
Explain the levels of disease prevention and control.

</td>
<td>

Reproductive system and human sexuality

2.4 Concept of disease, sickness, and illness
2.5 Mode of transmission and preventive measures of airborne, waterborne, foodborne, fecal borne, insect borne diseases, and sexually transmitted infections
2.6 Risk factors and preventive measures of non-communicable diseases

Hypertension
Cancer
Diabetes

2.7 Levels of disease prevention and control (Primordial, primary, secondary, and tertiary)
</td>
</tr>
<tr>
<td>
Activities

The teacher facilitator will arrange the tutorial class related to the introduction and functions of cell, tissue and sense organs and collect reflection from prospective teachers.
The teacher facilitator will provide learning materials related to human body system and arrange discussion sessions with prospective teachers.
Each student will be provided with reading materials about the mode of transmission and preventive measures of communicable disease. The teacher facilitators will encourage to search the related literature via website. They will review the reading materials and write a short-term paper in the given format.
Prospective teachers will review the learning materials related to risk factors and preventive measures of non-communicable diseases (Hypertension, Cancer, and Diabetes), prepare PowerPoints and present in the class.
The teacher facilitator will arrange the tutorial class

</td>
<td>
Pedagogical Implication

Use knowledge of human body system in health promotion of school children
Select appropriate pedagogical strategies to teach human body system.
Apply preventive measures against communicable and non-communicable diseases.
Develop term paper following the given format.

</td>
</tr>
</table>

related to the levels of disease prevention followed with discussion.	

Resources

- Budhathoki, C. B. & Wagle, B. (2076 BS). *Fundamental of public health*. Kathmandu: Pinnacle Publication.
- Dhakal, S.N. (2076 BS). *Fundamental of public health*. Kathmandu: Vidhyarthi Prakashan.
- Park, K. (2010). *Park's textbook of preventive and social medicine*. Jabalpur, India: M/S Banarsidas Bhanot Publishers.
- Regmi, P.R. (2070). *Prevention and control of heart diseases*. Modern Printing Press.
- Sherchan, L. & Upreti, Y.R. (2078 BS). *Fundamental of public health.* Kathmandu: Quest Publication.
- Tamparo, C.D., & Lewis, M.A. (2011). *Diseases of human body* (Fifth Edition). Philadelphia, PA: F.A. Davis Company.
- Tutitui, R. &. Suwal, B. (2063). *Human anatomy and physiology.* Kathmandu: Vidhyarthi Prakashan.
- Webber, R. (2005). *Communicable diseases epidemiology and control: A global perspective*. Massachusetts Avenue: CABI Publishing.
- Upreti, Y.R. (2069). *Human illness: A resource book*. Kathmandu: Quest Publication.
- श्रेष्ठ) ,बिनिता ,विजय लाल र श्रेष्ठ ,२०६७ ,(प्राणघातक रोगहरुबाट बच्ने उपायहरु

Unit Three: Nutrition, Hygiene and Community Health	**(8)**
Specific Objectives	**Contents**
• Discuss the meaning of food, nutrition, and nutrients. • Describe digestion, absorption, and utilization of food in human body. • Explain determinants of the food choices and dietary behaviors. • Elucidate the concept of WASH and Ecosan. • Outline the concept and component of total sanitation. • Discuss ways to promote menstrual hygiene and management among adolescent girls. • Describe concept, importance, and components of	3.1 Introduction to food, and nutrition, nutrients 3.2 Digestion, absorption, and utilization of food in human body system 3.3 Determinants of food choices and dietary behaviours *3.4* Concept of WASH (Water, sanitation, and Hygiene) and Ecosan 3.5 Concept and components of total sanitation 3.6 Ways to promote menstrual hygiene and management in adolescent girls

community health. • Identify contemporary community health problems. • Explain mitigating measures to solve community health problems. • Describe use of contraception to avoid unwanted pregnancies and its consequences.	*3.7* Concept, importance, and components of community health *3.8* Contemporary community health problems *3.9* Measures to mitigate community health problems 3.10 Use of contraception to avoid unwanted pregnancy and its consequences
Activities • The prospective teachers will share their prior understanding about introduction to food, nutrition, and nutrients. The teacher facilitators will arrange the tutorial class. • The teacher facilitator will provide learning materials related to digestion, absorption, and utilization of food in human body and arrange discussion session with prospective teachers. • Prospective teachers will be divided into groups. The teacher facilitator will provide reading materials related to factors determining food choices and dietary behaviours to each group. Each group member will review the reading materials and discuss in the group. They will prepare PowerPoints or notes and share in the classroom. • Prospective teachers consult a reading material related to introduction to WASH, Ecosan toilet, and community health and share their understanding among the peers. • Prospective teachers will be divided into groups. Each group will have a field work to interact with local people including community health workers and collect their narratives. Based on the field work, they will share	**Pedagogical Implication** • Develop healthy food choices and dietary behaviours. • Adopt menstrual hygiene practice. • Collect firsthand contemporary community health problems and apply mitigating measures. • Use contraceptive devices to avoid unwanted pregnancies and its consequences. • Select appropriate pedagogical strategies to teach nutrition, hygiene, and community health.

contemporary community health problems. The group will explore the mitigating measures of community health problems through inter-group discussion. • Prospective teachers will be divided into groups. They will discuss on effectiveness of various types of contraception. They will prepare PowerPoints or develop worksheet and share in the classroom.	

Resources

- Adhikari, R.K. (2068 BS). *Nutrition and health.* Kathmandu: Educational Publishing House.
- Budhathoki, C. B. & Wagle, B. (2076 BS). *Fundamental of public health*. Kathmandu: Pinnacle Publication.
- Dhakal, S.N. (2076 BS). *Fundamental of public health*. Kathmandu: Vidhyarthi Prakashan Devkota, B. (2056). *Community health diagnosis*. Kathmandu: Ratna Pustak Bhandar.
- Dhakal, S.(2076). *Food and nutrition education*. Kathmandu: Student Book Bhandar.
- Kar, K. (2008). *Handbook on community led total sanitation (CLTS)*. UK: Institute of Development Studies.
- Lal, H. (2007). *Food & nutrition: Medical, nursing, and allied science.* New Delhi: CBS Publishers and Distributors.
- Mc Kenzie, J.F., Pinger, R.R. & Kotecki, J.E. (2005). *An introduction to community health* (5th ed.). Boston: Allyan and Bacon, US.
- Park, K. (2010). *Park's textbook of preventive and social medicine*. Jabalpur, India: M/S Banarsidas Bhanot Publishers.
- Pradhananga, Y. & Shrestha, D.R. (2060 BS). *Samuday Shiksha Ko Ruprekha.* Kathmandu: Education Publishing House.
- Sherchan, L. & Upreti, Y.R. (2078 BS). *Fundamental of public health.* Kathmandu: Quest Publication.
- **भट्टराई, गीता** (2049), **खाद्य तथा पोषण, काठमाडौँ: त्रिभुवन बिश्वबिधालय, पाठ्यक्रम बिकास केन्द्र**

Unit: IV Yoga, Meditation and Mental Health (Practical)	**(10)**
Specific Objectives	**Contents**
• Demonstrate micro-Yoga activities. • Demonstrate 12 steps of Surya Namaskar with breathing	4.1 Micro Yoga activities (Yogic Sukshma Vyayam practice)

pattern. • Demonstrate Yoga poses. • Demonstrate guidance-based Pranayam. • Practice meditation for mindfulness.	4.2 Surya Namaskar 4.3 Yoga Poses (Asana) • Padmasana • Vajrasana, • Paschimottanasana • Bhujangasana • Naukasana • Padahastanasana • Vrikshasana • Markatasana • Chakrasana • Pawanamuktasana • Matyasana • Halasana • Savasana (Yoga Nindra) 4.4 Pranayam (Nadi Sodhan, Anulom-Vilom, Bhastrika, Bhramari, and Kapalbhati) 4.5 Meditation practice for cultivating mindful living
Activities	**Pedagogical Implications**
• Teacher facilitator will demonstrate micro yoga activities and ask prospective teachers to practise accordingly. Teacher facilitator will supervise their position and performance. • Teacher facilitator will demonstrate 12 steps Surya Namaskar with breathing pattern and ask prospective teachers to practise accordingly. Teacher facilitator will supervise their position and performance. • Teacher facilitator will demonstrate different poses of Yoga and ask prospective teachers to practise accordingly. Teacher facilitator will supervise their position and performance. • Teacher facilitator will demonstrate Pranayam and ask	• Demonstrate micro yoga activities in daily life. • Demonstrate basic steps of Surya Namaskar with breathing exercises in daily life and classroom. • Practice and demonstrate different yoga asanas in daily life and classroom. • Demonstrate guidance-based meditation in daily life. • Apply yoga, Pranayam and meditation practice for mindful living in daily life and classroom. • Select and use appropriate pedagogies for

prospective teachers to practise accordingly. Teacher facilitator will supervise their position and performance. • Teacher facilitator will demonstrate meditation practice and ask prospective teachers to practise accordingly. Teacher facilitator will supervise their position and performance.	practicing yoga class.

Resources

- Budhathoki, C. B., Wagle, B. & Shrestha, M. K. (2077 BS). *Health and physical education* (in Nepalí). Kathmandu: Pinnacle Publication.
- Finney, S. (2009). *The Yoga Handbook*. The Rosen Publishing Group, Inc.
- Giri, S. & Poudel, T.R. (2077 BS). *Health and physical* education (in Nepalí). Kathmandu: Karudhara Publication.
- Maharjan, R.K., Dhakal, S.N. & Aryal, B. (2077 BS). *Health and physical education (in Nepalí)*. Kathmandu: Vidhyarthi Publication.
- Sherchan, L. & Upreti, Y.R. (2077 BS). *Health and physical education (in Nepalí)*. Kathmandu: Quest Publication.
- White, D. G. (2019). *The yoga sutra of Patanjali: A biography (Vol. 43)*. Princeton University Press.

Unit V: Games and Sports (Practical) (22)

Specific Objectives	Contents
• Demonstrate warm-up and cooldown exercises. • Practice and demonstrate different skills of athletics. • Demonstrate different skills of any two major games. • Demonstrate different skills of physical training and drills.	5.1 Warm-up and cooldown Exercises 5.2 Athletics for physical fitness 5.3 Major games for physical fitness (any two) • Volleyball • Football • Basketball • Kabaddi • Kho-Kho • Badminton • Table Tennis • Cricket

	• Netball • Combat games 5.4 Physical training (PT) and drill 5.5 Aerobics or Weight training (Dance or Zumba)
Activities	**Pedagogical implications**
• Prospective teacher will instruct students for Warm-up exercises. Students must follow head to foot or foot to head principle for warm-up exercises. • Prospective teacher will demonstrate different skills of games and sports and let students to practice them. • Prospective teacher will divide students into five groups. Facilitator will demonstrate strategies of games and sports for each group and let students to repeat different skills and strategies of games and sports. • Prospective teacher will prepare warm-up exercises before games and recreational activities for students at the end of the lesson.	• Apply the principle of physical exercise with simple load, increase load slowly and intensify the load. • Select the appropriate pedagogies for warm-up exercises. • Apply demonstration, participation and repetitions for lead-up exercise, main activities and recreational activities in physical education and sports activities. • Communicate students for preparing physical facilities and equipment to conduct practical class of games and sports. • Observe different sports competitions and prepare one-week plan to develop offensive and defensive strategies. • Demonstrate and practice of different skills and techniques of games and sports for better health and fitness.

Resources

- Baruwal, H. B., Shrestha, S., Datta, B. M. T., Shrestha, M. K. & Poudel, T. (2019). *Foundation of physical education*. Kathmandu: Pinnacle publication, Putalisadak, Nepal.
- Bucher, C. A. (1979). *Foundations of physical education.* London: The C.V. mosby company, pp 54-67.
- Budhathoki, C. B., Wagle, B. & Shrestha, M. (2019). *Health and physical education*. Kathmandu: Pinnacle Publication.
- Budhathoki, C. B., Wagle, B. & Shrestha, M. K. (2077 BS). *Health and physical education* (in

Nepalí). Kathmandu: Pinnacle Publication.

- Maharjan, R. K. & Adhikari, P. (2014). *Foundation of physical education*. Kathmandu: Sunlight Publication.
- Sherchan, L. & Upreti, Y.R. (2077 BS). *Health and physical education (in Nepalí)*. Kathmandu: Quest Publication.
- Sherchan, L. (2019). *Foundation of Physical education. Kathmandu: Quest Publication.*

4. Evaluation Criteria

4.1 Internal Evaluation 25 (40% off 65)

Internal evaluation will be conducted by course teacher based on following activities.

Activities	**Full Marks**
Attendance	3 Marks
Participation in learning activities	2 Marks
First assignment	5 Marks
Second assignment (Midterm exam) assessment	10 Marks
Third assignment/ assessment	5 Marks
Total	**25 Marks**

4.3 Inter Evaluation 15 % Practical

Internal Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

Activities	**Full Marks**
Attendance	5 Marks
Participation	2.5 Marks
Skills of games and sports	5 Marks
Practical skills of yoga and meditation	2.5 Marks
Total	**15 Marks**

4.4 External Evaluation 40 (60% of 65) 40 Marks

Examination Division, Office of the Dean, Faculty of Education will conduct the final examination at the end of the semester. The types and number of questions to be included in the final paper are as follows.

Questions	**Marks**
Objective type question (multiple choice 10 x1 point)	10 Marks
Short answer question (6 questions x5 points with 2 or)	30 Marks
Total	40 Marks

External Evaluation (40% of 35) Practical **20 Marks**

External practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, Subject teacher and expert nominated by campus/department chief.

Activities	**Full Marks**
Athletics	5 Marks
Games and sports	5 Marks
Physical training (P.T.)	2.5 Marks
Yoga and meditation	2.5 Marks
Notebook preparation (any one game)	2.5 Marks
Viva	2.5 Marks
Total	**20 Marks**

Sost. Ed. 471: Teaching Social Studies -1

Semester: First

Code: Sost. Ed. 471 Full Marks: (65+35) =100

Level: PGDE Credit hours: 3

Nature of Course: Theoretical + Practical (2+1) Teaching hours: (32+32) =64

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1. Course Description

This course is designed for the first semester of the three-semester postgraduate diploma in education (PGDE) program to provide students with in-depth understanding of teaching social studies in schools of Nepal. In Nepal, social studies education is a compulsory subject in the school curriculum from grades 1–12. It is an integrated subject and designed for educational purposes. It requires highly qualified teachers and educators who have a deep understanding of the interdisciplinary nature of social studies. However, there seems to be a shortage of skilled teachers who can teach social studies at the school level. Therefore, this course aims to produce social studies teacher educators (grades 1–8), educational researchers, and educational administrators at the basic level of schools by imparting social studies pedagogical content knowledge through a three-semester PGDE program to qualified graduates of other faculties. This is a major course (for Pedagogy A), and in order to be qualified for a social studies degree for Pedagogy B, candidates must study any one subject from the list of social science groups.

Candidates who have completed a bachelor's degree in the humanities and social sciences (BA), law, management (BBA/B.Com.), or other relevant educational institutions and have at least 200 Marks in social science courses, or appointed as a social studies teacher at the school level eligible for this course.

2. General Objectives of the Course

The general objectives of this course are to produce social studies teacher educators for the basic level of schools. The students will be able to:

1. introduce the concept, nature, and scope of social studies education;
2. critically analyze the relevance of social studies in the 21st century,
3. evaluate the selection and organization of subject matters in the basic level social studies curricula;

4. develop and use the planning and organization of instruction
5. select, prepare, and use locally available instructional materials
6. prepare a field-based report for the classroom presentation.

3. Specific Objectives and Content of the Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

<table>
<tr><th colspan="2">Unit I: Introduction to Social Studies (9)</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>• Explain the meaning and definition of social studies.
• Describe the nature and scope social studies.
• Discuss the purpose and importance of teaching social studies.
• Apprise the relationships and differences between social studies and social sciences, humanities, natural science, and ICT, social education and social studies education.
• Generalize the social sciences concepts in teaching social studies
• Critically analyze the approaches to the study of social studies.
• Illustrate the historical development of social studies education in Nepal.
• Critically analyze the foundations of social studies (philosophical, social, psychological, and pedagogical).</td><td>1.1. Meaning and definition
1.2. Nature and scope
1.3. Purpose and importance
1.4. Relationships and differences between social studies with
1.4.1 Social sciences and humanities
1.4.2 Natural science,
1.4.3 ICT
1.4.4 Social education
1.4.5 Social studies education
1.4.6 Generalization of social sciences concepts
1.5. Approaches
1.6. Historical development
1.6.1 Global level
1.6.2 Nepal
1.7 Foundations of social studies
1.7.1 Philosophical
1.7.2 Social
1.7.3 Psychological and
1.7.4 Pedagogical</td></tr>
<tr><th>Activities</th><th>Pedagogical implications</th></tr>
</table>

• The instructor will provide learning materials to the prospective teachers in the classroom and give them the task of reviewing the text, curriculum, and national curriculum framework to develop their critical understanding of social studies teaching. • The instructor will deliver the subject areas (contents) using PowerPoint, followed by question-answer and group discussion methods in the classroom. • The prospective teachers will take part in class presentations on the given subject matter and critically assess the class presented by their peers. • The instructor will evaluate the class presentation and provide feedback for further improvements.	• Critical thinking about the use and best practices of social studies education in school curricula • Develop a critical understanding of the concepts, nature, scope, and importance of teaching social studies at various levels. • Construct different types of charts to show the relationships of social studies with other disciplines (geography, history, economics, political science, sociology, etc.). • Generalize the different social sciences concepts in teaching social studies. • Develop an understanding of the themes and approaches to the study of social studies. • Construct timelines to show the historical development of social studies. • Employ social studies knowledge, values, and skills to develop civic education through face-to-face and digital platforms. • Prepare and use instructional planning, resource management, and collaboration with parents and local government for their professional development.

Resources

Lawal, M. B. & Oyeleye, A. S. (2003). *Foundations and principles of social studies education*. Lagos: A Triads Associate.

Mangal, S. K. and Mangal, U. (2008). *Teaching social studies*. PHI Learning Pvt. Ltd.

Martorella, P. H. (2001). *Teaching social studies in middle and secondary schools*. Merrill Prentice Hall.

Pathak R. P. (2012). *Teaching of social studies*. Pearson Education

ढकाल, केशवराज (२०७२), सामाजिकअध्ययन शिक्षण । क्वेस्ट पब्लिकेशन ।

पण्डित, दिननाथ (२०७१), सामाजिक अध्ययन शिक्षण । श्रीमती राजकुमारी पण्डित ।

पन्त, तुलाराम (nd)..., सामाजिक अध्ययन शिक्षण । पाठक्रम विकास केन्द्र ।

पाँडे रामकुमार (२०५४), सामाजिक शिक्षा सिद्धान्त र शिक्षण । रत्नपुस्तक भण्डार ।

Unit II: Relevance of Bloom's Taxonomy and Social Studies in the 21st-Century (9)

• Describe concept and origin of taxonomy of educational objectives • Explain elements of cognitive, affective and psychomotor domains of learning • Write effective instructional/behavioral objectives considering lower to higher order thinking skills • Define the concepts and importance of 21st-century skills in social studies. • Discuss the relevance of 21st century skills in social studies classroom. • Integrate 21st century skills into social studies education to address the needs of adolescent. • Develop critical and creative thinking on social studies classroom. • Apprise the cultural sensitivity in the social studies classroom	3.1 Bloom's and Revised Bloom's taxonomy of educational objectives 3.1.1 Concept and origin 3.1.2 Cognitive, affective and psychomotor domains of learning 3.1.3 Formulating instructional/behavioral objectives (lower to higher order thinking) 3.2 Concepts of 21st century skills 3.2.1 Learning skills 3.2.2 Literacy skills 3.2.3 Life skills 3.3 Relevance of 21st century skills 3.4 Integrating 21st century skills to address the needs of adolescent 3.5 Critical and creative thinking 3.6 Cultural sensitivity in the social studies Classroom

	3.7 Practical skills: 3.7.1 Writing instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking (Prepare at least 30 objectives) presentation and documentations 3.7.2 Writing behavior objectives in affective and psychomotor domain learning (15+15=30 objectives), presentation and documentation 3.7.3 Critical thinking exercise and role plays
Activities	**Pedagogical implications**
• The instructor will search for learning resources related to classroom pedagogy from different sources. • The instructor will demonstrate components/elements of cognitive, affective and psychomotor domains of learning and engage students in discussion and writing instructional objectives in each component of domains of learning. • Prospective teachers will engage students in glossary study, participation in question answering, group work and discussion, preparation of 21st century skills, and individual work to create a learning environment. • Prospective teachers will engage students in	• Develop a critical understanding of classroom pedagogy for professional • Participation in classroom observation to understand 21st century skills learning skills (four "Cs"- critical thinking, communication, collaboration, and creativity); life skills (flexibility, initiative, social skills, productivity, leadership); and literacy skills (information literacy, media literacy, technology literacy) related in the social studies classroom. • Select appropriate teaching and learning strategies to deliver the concepts of classroom pedagogy in a real-world environment.

classroom presentations on the scheduled content area. • Prospective teachers will participate in classroom observation to understand classroom management and to develop their teaching competency. • Prospective teachers will develop values and ethics in their professional careers. • Prospective teachers will review books, journals, and articles related to classroom pedagogy to prepare a review report for classroom presentation.	• Search the digital resources to teach classroom pedagogy and encourage students to become self-motivated learners in the classroom. • Develop self-professional ethics and values and employ them in their professional lives.

Resources

Duplass, J. A. (2021). *The essence of teaching social studies: Methods for secondary and elementary teacher candidates*. Routledge.

Huang, R., Spector, J. M.& Yang, J. (2019). *Educational Technology: A primer for the 21st Century.* Springer Nature Singapore Pt. Ltd.

Karagiannis, N. & Marangos, J. eds. (2013). Toward a good society in the twenty-first century: Principles and Policies. Palgrave Macmillan.

Measures of Social and Emotional Skills for Children and Young People: A Systematic Review (Humphrey et al., 2011).

Teaching Pyramid (https://www.eciavic.org.au/pdevents/the-teaching-pyramid)

Unit III Overview of Social Studies Curriculum (12)	
• Discuss the meaning, concepts, and nature of the curriculum. • Critically analyze the approaches used for designing secondary-level social studies curricula. • Identify the learning goals and objectives.	3.1 Meaning, concepts and nature of curriculum 3.2 Approaches to the social studies curriculum design 3.2.1 Disciplinary approach 3.2.2 Multidisciplinary approach

• Critically analyze the sources of subject matters for designing social studies curriculum different sources (NCSS themes & NCF of Nepal). • Evaluate the existing basic-level social studies curriculum (Grade 1-8) of Nepal. • Prepare a model curriculum of social studies for any one grade of Basic Level following principles and approaches to curriculum design	3.2.3 Interdisciplinary approach 3.2.4 Integrated approach 3.3 Goals and objectives 3.4 Selection of subject matters in social studies curriculum 3.5 Overview of existing basic level social studies curriculum 3.6 Practical skills: Preparation of a model of social studies curriculum for any one grade of Basic Level, presentation and documentation
Activities	**Pedagogical implications**
• Prospective teachers will discuss the concept, aims, and principles of the social studies curriculum in groups. • Prospective teachers will review materials related to principles of selection, organization, and construction of curriculum and share their understanding in the class using innovative methods (e.g., PowerPoint presentation, gallery walk). The facilitator will conclude the session by summarizing the ideas shared by prospective teachers. • The class will be divided into groups of 4 to 5 members for the study of existing secondary-level curriculum strengths, weaknesses, and thematic areas. Each group will present their task in the classroom. • The social studies curriculum, national curriculum framework, and related reading materials will be provided to the prospective	• Develop ideas to the principles selection and organization of social studies curriculum. • Study of the secondary-level of social studies curriculum to understand shortcomings of a good curriculum. • Translate the skill for designing a good (child-centered) social studies curriculum.

teachers, and then we will ask them about the shortcomings of the social studies curriculum in Nepal.	

Resources

Mangal, S. K. and Mangal, U. (2008). *Teaching social studies*. PHI Learning Pvt. Ltd.

Martorella, P. H. (2001). *Teaching social studies in middle and secondary schools*. Merrill Prentice Hall.

Pathak R. P. (2012). *Teaching of social studies*. Pearson Education

ढकाल, केशवराज (२०७२), सामाजिकअध्ययन शिक्षण । क्वेस्ट पब्लिकेशन ।

पण्डित, दिननाथ (२०७१), सामाजिक अध्ययन शिक्षण । श्रीमती राजकुमारी पण्डित ।

पन्त, तुलाराम (nd)..., सामाजिक अध्ययन शिक्षण । पाठक्रम विकास केन्द्र ।

पाँडे रामकुमार (२०५४), सामाजिक शिक्षा सिद्धान्त र शिक्षण । रत्नपुस्तक भण्डार ।

Practical Works (16+16=32)

Unit IV: Instructional Design, Planning and Organization of Instruction (18)

• Explain the concepts of teaching and instruction • Distinguish between teaching and instruction • Critically analyze the teaching as an art or science, • Evaluate the teaching as profession • Discuss the nature and characteristics of teaching • Describe concepts and needs of instructional design in teaching and learning at school, • Explain and apply ADDIE model in desginging and planning instruction for social studies curriculum • Apply ASSURE model in planning instruction according to social studies curriculum	4.1 Concepts of teaching and instruction 4.1.1 Concepts 4.1.2 Differences 4.2 Teaching as an art and science 4.2.1 Teaching as an art 4.2.2 Teaching as a science 4.3 Teaching as a profession 4.4 Instructional design 4.4.1 Concepts and needs 4.4.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) model 4.4.3 Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials,

• Explain the concepts and importance of instructional planning for effective teaching • Critically analyze the planning and organization of instruction • Analyze criteria for the construction of an annual plan, unit plan, and lesson plan. • Prepare a model instructional design for teaching social studies following ASSURE steps • Prepare annual plan, unit plan, and lesson plan based on the basic level social studies curriculum of Nepal for classroom presentation.	Require learners' participations, and Evaluate and revise) 4.5 Planning and organization of instruction 4.5.1 Planning 4.5.2 Instructional planning 4.6 Types instructional planning 4.6.1 Annual plan 4.6.2 Unit plan 4.6.3 Lesson plan (components of behavioral and constructivist models of lesson planning) 4.7 Practical skills: a) preparation instructional design for teaching social studies, b) preparation of annual and unit plan, c) exercise for writing behavioral objectives according to Bloom's taxonomy for lesson plan, and d) preparation model lessons (10 lesson plans), presentation and documentation
Activities	**Pedagogical implications**
• The instructor will provide reading materials related to the concepts, types, and importance of instructional planning in teaching social studies. • Glossary study • Participation in question answer • Participation in group work and discussion • Discussion on the various aspects of teaching and instruction • Construction of work plans, unit plans, and	• Develop a critical understanding about the concepts and importance of teaching and instruction in teaching social studies. • Apply models and process of instructional design while planning social studies instruction based on the basic level social studies curriculum (grades 1-8). • Prepare and use of different types of instructional planning. • Select appropriate teaching-learning

lesson plans • Preparation of a micro-lesson plan for classroom presentation • School visit to observe the use of different types of instructional planning by teachers in their real teaching	activities, instructional materials and evaluation techniques in the social studies classroom. • Prepare a report based on the different instructional plan from the basic level social studies curriculum for classroom presentation as well as final examination.

Resources

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer.

Brown, A., and Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group

Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc.

Mangal, S. K. and Mangal, U. (2008). *Teaching social studies*. PHI Learning Pvt. Ltd.

Mangal, S. K. and Mangal, U..\Essentials of Educational Technology (S.K. Mangal, Uma Mangal) (Z-Library) (1).pdf

Martorella, P. H. (2001). *Teaching social studies in middle and secondary schools*. Merrill Prentice Hall.

Pathak R. P. (2012). *Teaching of social studies*. Pearson Education

ढकाल, केशवराज (२०७२), सामाजिकअध्ययन शिक्षण । क्वेस्ट पब्लिकेशन ।

पण्डित, दिननाथ (२०७१), सामाजिक अध्ययन शिक्षण । श्रीमती राजकुमारी पण्डित ।

पन्त, तुलाराम (nd)..., सामाजिक अध्ययन शिक्षण । पाठक्रम विकास केन्द्र ।

पाँडे रामकुमार (२०५४), सामाजिक शिक्षा सिद्धान्त र शिक्षण । रत्नपुस्तक भण्डार ।.

Unit V: Instructional Materials (8+8=16)

• Explain the concepts, types, and importance of instructional materials in social teaching. • Acquaint students' knowledge and skills with the collection and use of locally available instructional materials.	5.1 Instructional Materials 5.1.1 Concepts 5.1.2 Types- audio, audiovisual, printed 5.1.3 Importance

• Selecting and using community resources in teaching social studies • Critically analyze the importance of textbooks and teacher guides in teaching social studies. • Demonstrate skills for constructing maps, charts, graphs, diagrams, models and audio-visual materials for teaching social studies education in schools.	5.2 Collection, Construction and Use of Locally Materials 5.3 Community Resources- selection and uses 5.4 Importance of Textbook and Teacher Guidebooks 5.5 Practical skills: constructions of map, chart, graphs, diagrams, models and audio-visual materials for teaching social studies, and presentation in class
Activities	**Pedagogical implications**
• Glossary study • Participation in the question answer • Participation in group work and discussion • Collection and preparation of locally available instructional materials for classroom presentation • Construction of different types of charts and diagrams: relationships • Study of textbooks and teacher guides in teaching social studies • School visiting for the observation of real uses of instructional materials in social studies classroom • PowerPoint presentation • Construction and use of maps, charts, graphs, and diagrams	• Develop skills for the selection, preparation and use of instructional materials. • Selection and use of audio, video and printed materials in the social studies classroom • Interaction with community resources in teaching social studies classroom. • Share the school visiting report for the uses of instructional materials in social studies classroom • Prepare a review documents from the basic level social studies textbook and teacher guidebooks for classroom presentation as well as final examinations. • Prepare and use various instructional aids and materials for teaching social studies

Resources

Mangal, S. K. and Mangal, U. (2008). *Teaching social studies*. PHI Learning Pvt. Ltd.

Mangal, S. K. and Mangal, U..\Essentials of Educational Technology (S.K. Mangal, Uma Mangal) (Z-Library) (1).pdf.

Martorella, P. H. (2001). *Teaching social studies in middle and secondary schools*. Merrill Prentice Hall.

Pathak R. P. (2012). *Teaching of social studies*. Pearson Education

Culbert, J. C. & Others (). *Social studies concepts and generalizations: A framework for curriculum development*. Office of Education (DREW), Washington, D.C.

ढकाल, केशवराज (२०७२), सामाजिकअध्ययन शिक्षण । क्वेस्ट पब्लिकेशन ।

पण्डित, दिननाथ (२०७१), सामाजिक अध्ययन शिक्षण । श्रीमती राजकुमारी पण्डित ।

पन्त, तुलाराम (nd)..., सामाजिक अध्ययन शिक्षण । पाठक्रम विकास केन्द्र ।

पाँडे रामकुमार (२०५४), सामाजिक शिक्षा सिद्धान्त र शिक्षण । रत्नपुस्तक भण्डार ।

4. Evaluation criteria

4.1 Internal Evaluation 25 (40% of 65)

Course teacher based on following activities will conduct internal evaluation

1)	Attendance	3 Marks
2)	Participation in Learning activities	2 Marks
3)	First assignment	5 Marks
4)	Second assignment (Midterm exam) assessment	10 Marks
5)	Third assignment/ assessment	5 Marks
	Total	**25 Marks**

4.2 Inter Evaluation 15 % Practical

Internal Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

1)	School visit and Report writing	5 Marks
2)	Preparing a model curriculum	5 Marks

3) Preparing unit plan, lesson plan and materials	5 Marks
Total	**15 Marks**

4.3 **External Evaluation 40 (60% of 65) 40 Theory**

Examination Division, Office of the Dean, Faculty of Education will conduct the final examination at the end of the semester. The types and number of questions to be included in the final paper are as follows.

1) Objective type question (multiple choice 10 x 1 point)	10 Marks
2) Short answer question (6 questions x 5 points with 2 or)	30 Marks
Total	**40 Marks**

4.4 External Evaluation 20 (40% of 35) Practical

External Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, Subject teacher and expert nominated by campus/department chief.

1) School visit report	5 Marks
2) Records of practical activities of curriculum development, Instructional design, unit plan and lesson plan	10 Marks
3) Oral examination.	5 Marks
Total	**20 Marks**

Sc. Ed. 471: Teaching Science and Technology

Course No.: Sc. Ed. 461 Nature of Course: Theoretical and Practical

Level: Postgraduate Diploma in Science Education (PGDE) Credit hours: 2 (T) + 1 (P)

Semester: First Total teaching hours: 32 (T) + 48 (P)*

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1. Course Description

This course is designed to acquaint perspective teachers with basic knowledge of teaching science and technology education. The course aims to develop professional teachers equipped with pedagogical knowledge, a better understanding of classroom practices, and proficiency in teaching and learning science. Furthermore, it incorporates engaging perspective teachers in activities that help them to develop competency and recent pedagogical skills to craft science learning activities.

2. General Objectives

The general objectives of this course are as follows:

- To deliver the knowledge of developmental perspectives of science and technology education.
- To equip the perspective teachers with the knowledge of technology in science education.
- To acquire the knowledge of objectives of teaching science and scientific attitude.
- To acquaint perspective teachers with the school science curriculum and teaching and learning resources.
- To demonstrate an understanding of pedagogical approaches and co/extra-curricular activities for science teaching and learning.
- To familiarize perspective teachers with techniques and strategies of classroom management and professional development.

3. Specific Objectives and Contents

The objectives of this course are as follows:

Specific Objectives	Contents
• Explain science and science	Unit I: Perspectives of Science and

education. • Enlist the scope of science education in daily life. • Describe the developmental, nurturing, transmission, and apprenticeship perspectives of teaching science. • Illustrate the concept of paradigm and paradigm shift. • Demonstrate Thomas Kuhn's phases of paradigm shift. • Explain scientific and technological literacy. • Describe the role of scientific and technological literacy. • Illustrate the implications of science, technology, and society in science education.	Technology (4 pds.) • Science and science education • Scope of science education • Perspectives on teaching science • Paradigm and paradigm shift • Kuhn's phases of science • Scientific and technological literacy (STL) • Science, technology and society (STS)
Activities • Perspective teachers provide learning resources in the form of hands-out and soft copies for reading materials such as articles, book chapters, and books a few days before the class. In the class, the facilitator provides them time to share ideas (based on the specific objective) and asks them to share their ideas. Later on, the facilitator provides opportunity perspective	**Pedagogical Implications** • Explain science and science education in relation to the meaning, scope, and perspectives. • Application of science and science education in relation to the classroom pedagogy, evaluation techniques, knowledge generation, and exploration. • Application of paradigm and paradigm shift in teaching and learning.

<table>
<tr>
<td>teachers to review the resources and present their critical understanding in the class.
• The facilitator delivers content by using Sway and PowerPoint presentation, followed by question-answer and group discussion focusing on the application of the contents.
• The facilitator critiques, comments, and summarizes the content connecting with experiences, insights, and reflections of perspective teachers.</td>
<td>• Explore Kuhn's phases of science and how it helps to understand science and science education in different phases.
• Apply the role of scientific and technological literacy to uplift the understanding of the people living in a society.</td>
</tr>
<tr>
<td colspan="2">Resources

• Acharya, K. P. (2020). Methods of Teaching Science: A Contemporary Approach. Intellectual's Book Palace.
• Amos, S. &. Boohan, R. (2002). Aspects of teaching secondary science: Perspective on practice. New York & London: Routledge Taylor and Francis Group. (For Unit I)</td>
</tr>
<tr>
<td>• Define technology for teaching
• Illustrate different types of technologies in science and technology subject.
• Explain technological knowledge, pedagogical knowledge, content knowledge, technological content knowledge and technological</td>
<td>Unit II: Technology in School Education (5 pds)

2.1 Introduction

2.2 Different types of technologies

2.3 Technological pedagogical contents knowledge (TPACK) framework

2.3 Use of technology in science</td>
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</table>

pedagogical knowledge. • Apply recent technology in teaching and learning science at the school level. • Illustrate teaching science in the 21st century • Discuss the use of ICT technology for perspective teachers. • Describe technology-based teaching- learning to support learning differences. • Explain the features of presentation applications • Describe the use of simulations, animations, and games for teaching and learning. • Elaborate the use of internet in the school science classrooms. • Discuss the features of the interactive whiteboard.	curriculum in school level 2.4 Teaching science in the 21st century 2.5 ICT technology for teachers 2.6 Support of learning differences through technology 2.7 Presentation applications 2.8 Simulations, animations and games 2.9 Using the internet in the school science classroom 2.10 Interactive whiteboard
Activities • Perspective teacher searches and studies the learning resources available in the e-library. • Perspective teacher engages in-class presentations on the scheduled content area. • The facilitator applies cooperative learning methods (e.g., TIPS, LT) to engage perspective teachers in	**Pedagogical Implications** • Recognize the technological pedagogical contents knowledge (TPACK) framework and apply it in the class. • Select and apply pedagogical strategies by the use of ICT technology. • Apply learning differences through technology and

<table>
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<td>learning activities.
• Perspective teacher engages in critical analysis of the technological pedagogical contents knowledge (TPACK) framework.
• The perspective teacher conducts panel discussions on teaching science in the 21st century.
• Perspective teacher reviews the documents provided by the facilitator and reports in the class.</td>
<td>presentation applications.
• Use simulations animations and games for teaching learning of science.
• Use the internet in the school science classroom and interactive whiteboard.</td>
</tr>
<tr>
<td colspan="2">Resources
• Holliman, R. & Scanlon, E (2004, Eds). Mediating science learning through
• information and communication technology. RoutledgeFalmer.
• Mohan, R. (2019). Innovative science teaching for physical science teachers (4th
• ed.). PHI Learning Private Limited.</td>
</tr>
<tr>
<td>• Define scientific attitude.
• Explain the characteristics of the scientific attitude.
• Illustrate the ways of developing scientific attitudes among perspective teachers.
• Describe the teacher’s role in developing scientific attitudes among perspective teachers.
• Explain the components of critical thinking in the science classroom.</td>
<td>Unit III: Scientific Attitude and Critical Thinking (5 pds.)
3.2 Scientific attitude
3.2.1 Characteristics of scientific attitude
3.2.2 Elements of scientific attitude
3.2.3 Ways of developing scientific attitude
3.3.4 Teacher’s role in developing scientific attitude
3.2 Creativity and critical thinking</td>
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- Discuss the implication of critical thinking in the science classrooms.

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3.3 Components of critical thinking

3.4 Ways of developing critical thinking

3.5 Implication of critical thinking in the science classroom.

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Activities

- Facilitator provides the reading materials related to scientific attitude and the traits of scientific attitude. Discuss it in class and share ideas.
- Perspective teachers present their ideas to develop ways of developing scientific attitudes.
- Review the documents related to the teacher's role in developing scientific attitudes.
- The perspective teacher provides creativity and critical thinking materials, shares ideas after reading the materials, and discusses them in class with critique.
- The facilitator provides insights on the topics like components of critical thinking and ways of developing critical thinking.

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Pedagogical Implications

- The perspective teacher develops a scientific attitude among the students.
- Develop ways of developing scientific attitudes among the students.
- Select the approaches of creativity and critical thinking.
- Acquaint the components of critical thinking and ways of developing critical thinking.

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Resources

- Acharya, K. P. (2020). *Methods of Teaching Science: A Contemporary*
  - *Approach*. Intellectual's Book Palace.
- Kalra, R. M. & Gupta, V. (2012). *Teaching of science: A modern approach*.

</td></tr>
</table>

<table>
<tr><td colspan="2">PHI Learning Private Limited.
• Davar, M. (2012). Teaching of Science. PHI Learning Private Limited.</td></tr>
<tr><td>• Design a sample of science curriculum for the school level in Nepal.
• Explain the approaches of science curriculum development.
• Discuss the issues in science curriculum development.
• Examine the school science curriculum of Nepal.
• Analyze science text-book and e-books.
• Explain the major features and functions of good science textbooks.
• Describe the concept and principles of the election of instructional materials.
• Explain the types of instructional materials for science teaching learning.
• Describe the importance of instructional materials.
• Explain the use of Edgar Dale’s cone of learning experience in teaching science.</td><td>Unit IV: Science Curriculum and Learning Resources (8 pds.)
4.1 Introduction
4.2 Approaches of science curriculum development
4.3 Issues of science curriculum development
4.4 Critical analysis of the school science curriculum of Nepal
4.5 Science textbook and e-books
4.6 Features and functions of good science textbooks
4.7 Analysis and evaluation of science textbook
4.8 Concept and principles of selection of instructional materials
4.9 Types of instructional materials for science teaching and learning
4.10 Importance of instructional materials
4.11 Edgar Dale’s cone of the learning experience for teaching science</td></tr>
<tr><td>Activities</td><td>Pedagogical Implications</td></tr>
</table>

• Perspective teacher provides learning resources in the form of hands-out and soft copies of reading materials, articles, book chapters, and books a few days before the class. • The facilitator delivers the contents by using a PowerPoint presentation, followed by question-answers and a group discussion method focusing on the application of the contents. • In the class, the facilitator provides them time to share ideas based on the topic (based on the specific objective) and asks them to share ideas. Later on, the facilitator provides perspective teachers to review the resources and present their critical understanding in the class. • The science teacher educator critiques, comments, and summarizes the content connecting with experiences, insights, and reflections.	• Apply the approaches of science curriculum development. • Reflect on the issues of science curriculum development and critical analysis of the school science curriculum of Nepal. • Enable perspective teachers to explore e-books, and discuss the features, and functions of good science textbooks. • Analyze science textbooks and discuss principles for the selection of instructional materials. • Discuss the importance of instructional materials in science education.
Resources • Acharya, K. P. (2020). *Methods of Teaching Science*. New Hira Books, Ktm. • Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.	
• Explain the pedagogical approaches	Unit V: Pedagogical Approaches and Co-

to teaching science. • Describe the principles of selecting teaching methods. • Write down the steps3 of the laboratory method. • Discuss the use of the heuristic method of teaching science. • Explain the problem-solving method with procedural steps. • Compare the inductive and deductive methods of teaching science. • Explain the concept and steps of problem-based learning. • Describe the steps of project-based learning. • Elaborate on the use of inquiry-based learning in science teaching and learning • Design an inquiry-based learning model for secondary science. • Explain research-based learning science. • Discuss the brainstorming with examples. • Compare co-curricular and extra-curricular activities with examples. • Explain the concept, objectives, and principles of co-curricular and extra-curricular activities.	curricular Activities (6 pds.) 5.1 Introduction 5.2 Principles of selecting teaching methods 5.3 Methods for teaching science 5.3.1 Laboratory method 5.3.2 Heuristic method 5.3.3 Problem-solving method 5.3.4 Inductive and deductive methods 5.3.5 Project-based learning 5.3.6 Inquiry-based learning 5.3.7 Research-based learning 5.3.8 Brainstorming 5.4 Hands-on, experiential activity, minds-on, high-level cognitive engagement 5.5 Co-curricular and extra-curricular activities 5.5.1 Concept, objectives, and principles of co-curricular activities 5.5.2 Importance of co-curricular activities

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- Describe the importance of co/extra-curricular activities.

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Activities

- Perspective teacher searches and study the learning resources available in the library and on the internet.
- Perspective teacher engages in-class presentations on the scheduled content area.
- The facilitator applies different methods for teaching science such as the laboratory method, heuristic method, problem-solving method, inductive and deductive methods, project-based learning, and inquiry-based learning.
- Perspective teachers engage in critical analysis of research-based learning, brainstorming, hands-on and experiential activity.
- Perspective teachers conduct different approaches to learning.

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Pedagogical Implications

- Apply different pedagogical approaches to teaching science.
- Critique on the issues in hands-on, experiential activity, minds-on, high-level cognitive engagement science curriculum development, and critical analysis of the school science curriculum of Nepal.
- Develop the capacity of science teachers to conduct co-curricular and extra-curricular activities.

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Resources

- Acharya, K. P. (2020). *Methods of Teaching Science: A Contemporary*
  - *Approach*. Intellectual's Book Palace.
- Kalra, R. M. & Gupta, V. (2012). *Teaching of science: A modern approach*. PHI Learning Private Limited.
- Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.

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</table>

• Explain the meaning of classroom management. • Illustrate student-centered classroom strategies. • Explain various classroom management strategies. • Explain the importance of classroom management techniques. • Explain the meaning and importance of science teachers' professional development. • Elaborate on different types of teaching skills • Describe science teachers' competencies. • Write the basic qualities of science teachers. • Explain the basic qualification of science teachers at the basic and secondary levels. • Describe the importance of professional training in recent instructional pedagogies.	Unit VI: Classroom Management and Professional Development (4 pds.) 6.1 Introduction 6.1.1 Classroom designs 6.1.2 Classroom management strategies 6.1.3 Importance of science classroom management 6.2 Science teachers' professional development 6.2.1 Teaching Skills 6.2.2 Science teachers' competencies 6.2.3 Basic qualities of science teachers 6.2.4 Professional training in recent instructional pedagogies
Activities • Perspective teacher searches and study the learning resources available in the library and on the internet. • Perspective teacher engages in-	**Pedagogical Implications** • The implications of this unit are to link relations between teaching and learning, for teachers' roles and responsibilities.

class presentations on the scheduled content area. • The facilitator applies classroom management strategies and discusses on the importance of science classroom management. • Perspective teacher engages in critical analysis of the science teachers' professional development. • In the class, the facilitator provides them time to share ideas based on the topic (based on the specific objective) and asks them to share ideas. Later on, the facilitator may provide perspective teachers to review the resources and present their critical understanding in the class. • The perspective teacher critiques, comments, and summarizes the content connecting with experiences, insights, and reflections.	• Classroom management, design, strategies to manage the techniques, and importance of science classroom management. • Design science teachers' professional development packages. • Develop the knowledge bases for teaching, teaching skills, and science teachers' competencies. • Develop the basic qualities of science teachers and professional training in recent instructional pedagogies.

Resources

- Cangelosi, J. S. (2014). *Classroom management strategies: Gaining and*
- *maintaining perspective teachers' cooperation (7th ed.).* Wiley & Sons, Inc.
- Rushton, E. A. C. (2021). Science education and teacher professional development:
- Combining learning with research. Springer International Publishing.
- Bishop, K. & Denley, P. (2007). *Learning science teaching*. Open University

Press.

- Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.
- Mohan, R. (2019). *Innovative science teaching for physical science teachers (4th ed.)*. PHI Learning Private Limited.

Note: The figures in the parenthesis indicate the appropriate teaching hours for the respective units.

Part II: Practical (48pds.)

Contents of Experiment/ Practical activities

S. N.	Units	Practical Works (Total :48pds.)
1	Unit I: Perspectives of Science and Technology (9 pds.)	1. Collect at least five indexed peer-reviewed Scopus research articles related to the content of unit 1. Share papers in groups. Read the articles (at least abstract) and discuss in the class. 2. Present PowerPoint presentation on the developmental, nurturing, transmission, and apprenticeship perspectives of teaching science.
2	Unit II: Technology in School Education (6 pds.)	1. Each student reviews a book/book chapter/ article and prepare review report in about 1500 words or design materials for teaching science.
3	Unit III: Scientific Attitude and Critical Thinking (9pds.)	1. Prepare a report on the characteristics of the scientific attitude. Also, incorporate based on the ways of developing scientific attitudes among perspective teachers. 2. Prepare a chart showing the teacher's role in developing scientific attitudes among perspective teachers in points. 3. Share ideas on the implication of critical thinking in the science classrooms.
4	Unit IV: Science Curriculum and Learning Resources (9pds.)	1. Design a sample science curriculum for the school level in Nepal. Present it in the class. 2. Present a paper based on the approaches of the science curriculum development process. Discuss the issues in science curriculum development in Nepal. 3. Take a science textbook at the school level (published by CDC). Explain its major features of it. Critically analyze it based on the physical features, contents, objectives, activities, and evaluation techniques. 4. Draw Edgar Dale's cone on chart paper and display

		it in the class. 5. Select a book or book chapter for review. Write a review report in about 1500 words based on (Title of the book/ book chapter, the purpose of the book, author, publisher and published year, subject areas covered by the book, presented subject matters, key learning from the book/ book chapter, overall quality of the book (your judgement) and relevancy of the book.
5	Unit V: Pedagogical Approaches and Co-Curricular Activities (9pds.)	1. Discuss the use of the heuristic method, problem-solving method, inductive and deductive methods, and problem-based learning. 2. Design project-based learning and present it in the class. 3. Prepare a report on inquiry-based learning in science teaching and learning. Draw the 5E model of inquiry-based learning. Elaborate on 'E' with examples. 4. Conduct co-curricular and extra-curricular activities based on the school-level science curriculum, present in the class, and prepare a report based on it.
6	Unit VI: Classroom Management and Professional Development (6pds.)	1. Design student-centered classroom strategies and explain various classroom management strategies. 2. Write a report based on the basic qualities of science teachers. Also, explain the basic qualification of science teachers at the basic and secondary levels. 3. Describe the importance of professional training in recent instructional pedagogies.

Resources for Practical Activities:

- Acharya, K. P. (2020). *Methods of Teaching Science: A Contemporary Approach*. Intellectual's Book Palace.
- Kalra, R. M. & Gupta, V. (2012). *Teaching of science: A modern approach*. PHI Learning Private Limited.
- Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.
- Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.
- Shivendra, C. (2006). *Contemporary Physics teaching*. Anmol Publication Pvt. Ltd.
- Sood, J. (2009). *Teaching of science.* Prentice Hall of India.

Instructional Techniques

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

General Instructional Techniques

Discussion	Project work
Demonstration	Cooperative and collaborative work
Presentation	Internet (web) surfing
Inquiry	Group work

Specific Instructional Techniques

Units	Specific Instructional Techniques
I	Presentation, discussion
II	Report writing, project work
III	Group work, paper writing
IV	Presentation, discussion
V	Report writing, discussion
VI	Project work, report writing

The teachers may decide the project work related to the course work.

Evaluation

Evaluation for Theory (Internal Assessment and External Assessment)

Nature of course	Internal Assessment	Semester Examination	Total Marks
Theory	25 Marks	40 Marks	65 Marks

Note: Perspective teachers must pass separately in internal assessment and semester examination.

Internal Evaluation 25 Marks

Internal evaluation will be conducted by the course teacher based on following activities:

1.	Attendance and participation in learning activities (80% compulsory)	5 Marks
2.	First assignment (written assignment)	5 Marks
3.	Second assignment (report writing and presentation)	5 Marks
4.	Third assignment/ Term exam	10 Marks
	Total	25 Marks

Note:

A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)

First assignment/assessment might be quiz, home assignment etc. according to the nature of the course. The second assignment/assessment might be project work, case study, seminar, survey/field study and individual/group report writing (in about 1500 words), term paper based on secondary data or review of literature and documents (in about 1500 words) etc. and the third assignment will be term exam.

External Evaluation (Final Examination) 40 Marks

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester. The marks distribution will be

Objective questions (Multiple Choice Questions 10 x 1mark)	10 Marks
Subjective short questions (6 questions with 2 'OR 'questions x 5 marks)	30 Marks
Total	Marks

Evaluation for Practical (Internal and External Evaluation)

Nature of course	Internal Evaluation	External Evaluation	Total Marks
Practical	15 Marks	20 Marks	Marks

6.2.1 Internal Evaluation 15 Marks

Internal Practical evaluation will be conducted in the campus/department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

Marks distribution for practical internal evaluation will be as following.

1.	Attendance (80% compulsory)	5 Marks
2.	Perspective teachers' portfolios (Record book and Books etc.)	5 Marks
3.	Participation, collaborative work and construction of teaching learning resources and planning for teaching learning ***	5 Marks
	Total	15 Marks

6.2.2 External Evaluation 20 Marks

External Practical evaluation will be conducted in the campus/department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

Marks distribution for practical external evaluation will be as following.

1.	Records of assignment on Experiment/ practical activities	5 Marks
2	Records of a sample science curriculum prepared by individual student	5 Marks
3.	Records of Project work on material development, design of Inquiry-based learning or project based learning	5 Marks

4.	Viva-voce	5 Marks
	Total	20 Marks

Note:

Perspective teachers must pass both in internal as well as external assessments of practical examination

A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)

** Practical teaching hours is 3 times more than teaching hours of theory (3x 16 = 48 hours)*

***A group consists of 15 perspective teachers and one teacher will be assigned for a group.*

****Construction of models, charts, teaching aids, develop concept map etc. Also, the collection of materials / designing physics lab, preparation of lesson plan, unit plan, annual plan, preparation of rubrics, developing test items of various levels etc. for teaching learning.*

Sc. Ed. 472: Teaching Physical Sciences

Course No.: Sc. Ed. 462 Nature of course: Theory + Practical

Level : Postgraduate Diploma in Education (PGDE) Credit hours: 2(T) + 1(P)

Semester: First Teaching hours: 32 (T) + 48 (P)*

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1. **Course Description**

The course is designed to develop professional physical science teachers with sound pedagogical knowledge, a better understanding of classroom practices and competence in various skills required for teaching-learning and evaluation in teaching physical sciences. This course is designed to acquaint the perspective teachers with the knowledge and skills for teaching physical sciences, specifically, teaching physics and teaching chemistry. This course deals with the methodological understanding, aims, values, and objectives of teaching physical sciences, curriculum innovation, approaches and planning, laboratory management, and evaluation in teaching physical sciences.

It enhances the ability to create reports, and presentations as well as the ability to use innovative lesson planning techniques, improvised materials, design physical sciences labs, and evaluate physical sciences at secondary level.

2. General Objectives

The objectives of this course are as follows:

To familiarize with the nature, aims and objectives of teaching physical sciences;

To acquaint the perspective teachers on teaching physical sciences curriculum with recent theories, and pedagogies;

To enhance knowledge and skills of instructional planning in teaching physical sciences;

To develop pedagogical skills, approaches and strategies in physical sciences;

To enable perspective teachers to design physical sciences laboratory and improvise materials;

To plan and develop evaluation skills for teaching physical sciences;

3. Specific Objectives and Contents

Specific Objectives	Contents
• Describe the nature of physical sciences. • Discuss aims of teaching physical sciences in schools for secondary level. • Enlist the objectives of teaching physical sciences. • Discuss the role of objectives in teaching physical sciences. • Elaborate the criteria for selection of objectives in teaching physical sciences. • Explain the bases for the formulation of objectives in teaching physical sciences. • Describe the taxonomy of educational objectives. • Discuss the process of writing instructional objectives. • Differentiate between aims and objectives in teaching physical sciences. • Discuss the concepts and misconceptions in physical sciences. • Explore indigenous knowledge of	Unit I: Nature, Aims and Objectives of Teaching Physical Sciences (5pds.) • Introduction • Nature of physical sciences • Aims of teaching physical sciences • Objective • Role of objectives • Criteria for selection of objectives • Bases for the formulation of objectives • Taxonomy of educational objectives • Writing instructional objectives from lower to higher order thinking • Concepts and misconceptions in physical sciences • Indigenous knowledge in physical sciences • Sustainable development for physical sciences • Issues in teaching physical sciences

physical sciences on the contextual basis. • Elaborate the role and importance of indigenous knowledge in physical sciences learning. • Illustrate that the physical sciences and sustainable development are interrelated. • Explore the issues in teaching physical sciences in secondary level.	
Learning Engagement	
Activities	Pedagogical implications
<u>Role of facilitator</u> • Facilitate perspective teachers for developing quiz, discussion, questions, objectives questions. • Enables perspective teachers to incorporate pertinent physical science principles by providing them with motivating issues of indigenous knowledge and sustainable development. • The facilitator critiques, comments and summarizes the content connecting with experiences, insights, and reflections of perspective teachers.	• Prospective teachers aims and objectives of teaching sciences and taxonomy of educational objectives for planning teaching science in schools • Prepare instructional objectives or behavioural objectives and test items considering lower to higher order thinking • Take part in the discussion and different questions. • Engage in designing and developing quiz, MCQs, short-answer questions, and objective type questions. • Engage perspective teachers in designing assignment techniques.

<table>
<tr><td colspan="2">Resources

Ahmad, S. (2007). Teacher's hand Book of Science. Anmol Publication Pvt. Ltd.

Amos, S. &. Boohan, R. (2002). Aspects of teaching secondary science: Perspective on practice. Routledge Taylor and Francis Group.

Dahal, B. K. (2021). Teaching Physics: A New Trends and Issues to Real Life. Nisha Sharma.

Kumar, A. (1995). Teaching of physical Sciences. Anmol Publication Pvt. Ltd.</td></tr>
<tr><td>• Introduce teaching physical sciences curriculum and its components.
• Illustrate the features of competency-based teaching physical sciences curriculum.
• Analyze the curriculum of secondary level teaching physical sciences curriculum.
• Introduce innovative physical sciences projects in-terms of their objectives, materials, procedure, application, and importance of
• -PSSC Project
- CHEM-study
• -Nuffield physics/ chemistry project
• -U.K. project-Salter's advanced
• physics/ chemistry.</td><td>Unit II: Physical Sciences Curriculum
(6pds.)
• Introduction
• Competency-based physics sciences curriculum
• Review of school-level physical sciences curricula
• Curriculum projects for innovation
• PSSC (Physical Science
• Study Committee Project)
• Chemical Education Material Study (CHEM-study)
• Nuffield physics/chemistry project
• U.K. project- Salter's Advanced physics/chemistry</td></tr>
<tr><td colspan="2">Learning Engagement</td></tr>
</table>

<table>
<tr><td>Activities</td><td>• Pedagogical implications</td></tr>
<tr><td><u>Role of facilitator</u>
• Facilitate for analyzing science curriculum of secondary level.
• Provides supportive documents for innovative projects related to physical science curriculum to the perspective teachers.
• Using the experiences, perceptions, and reflections of perspective teachers, the facilitator comments, summarizes, and analyzes the content.</td><td>• Engage perspective teachers in the analysis of curriculum of secondary level.
• Active participation of perspective teachers for making report for innovative physical sciences projects.
• Engage perspective teachers in designing assignment techniques.</td></tr>
<tr><td colspan="2">Resources
Bhatnagar A. B. & Bhatnagar S. S. (2004). Teaching of Science. Surya Publication.
Dahal, B. K. (2021). Teaching Physics: A New Trends and Issues to Real Life. Nisha Sharma.
Davar, M. (2012). Teaching of Science. PHI Learning Private Limited.
Jafri, A. V. (1979). Design and development of physics curricula. Physics Education, 14(2).</td></tr>
<tr><td>• Describe concepts of instructional designs
• Needs of instructional design in teaching and. Learning at school
• Explain and apply ADDIE model in designing and planning instruction for teaching mathematics at schools</td><td>Unit III: Instructional Design and Planning in Science Teaching (9 pds.)
Instructional designs
▪ Concepts and needs of instructional design,
▪ Models: ADDIE (Assess, Design, Develop, Implement and Evaluate)</td></tr>
</table>

• Apply ASSURE model in planning instruction for teaching mathematics according to school curriculum, • Define unit planning and design a unit plan based on a topic in physical sciences. • Explain meaning, significance and steps of lesson plan in physical sciences. • Describe the benefits of planning teaching lessons in physical sciences. • Explain the strategies of planning physical science lessons. • Prepare lesson plan based on the following approaches: • Herbert approach, • ABC approach, • Constructivist approach(5E), • Problem solving approach, • Investigative approach • Laboratory approach. • Discuss the criteria for the evaluation of lesson plan in physical sciences.	model ▪ Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) Instructional Planning • Unit and lesson planning • Meaning, significance and steps of lesson plan • Benefits of planning in teaching physical sciences • Designing a unit plan • Approaches to design lesson plan • Herbartian approach, • ABC approach, • Constructivist approach (5E approach), • Problem solving approach, • Investigative approach, • Laboratory approach • Criteria for the evaluation of lesson plan
Learning Engagement	
Activities	Pedagogical implications

<table>
<tr><td>Role of facilitator:

• Facilitate for making unit and lesson plans on different approaches.
• Provide supportive documents for designing unit and lesson plans.
• The facilitator critiques, comments and summarizes the content connecting with experiences, insights, and reflections of perspective teachers.</td><td>• Apply unit and lesson plans on related topics.
• Engage perspective teachers for active participation for making unit and lesson plans based on different approaches.
• Engage perspective teachers in designing assignment techniques.</td></tr>
<tr><td colspan="2">Resources

Acharya, K. P. (2020). Teaching of Science. New Hira Publications.

Rao, A. (1993). Teaching of Physics. Anmol Publications.

Sood, J. (2009). Teaching of science. Prentice Hall of India.</td></tr>
<tr><td>• Explain the major paradigm shifts in teaching and learning physical sciences.
• Describe the modular approach in teaching physical sciences.
• Explore the benefits of creativity in teaching physical sciences.
• Illustrate the critical thinking approach to teaching and learning physical sciences.
• Elucidate the ideas of developing creativity among perspective teachers in learning physical sciences.
• Mention the features of inquiry-based</td><td>• Unit IV: Approaches and Strategies
• in Physical Sciences Pedagogy
○ (5pds.)
• Paradigm shift in teaching and learning
• Pedagogical approaches in physical sciences
• Modular approach for teaching physical sciences
• Creativity and critical thinking approach
• Inquiry-based learning
• Strategies in teaching physical sciences</td></tr>
</table>

physics sciences teaching learning. • Explain the ways of developing inquiry among perspective teachers. • Discuss various types of inquiry approaches. • Discuss the following strategies in teaching physical sciences: • Concept mapping • Flipped learning • Simulation • Gaming mode	• Concept mapping • Flipped learning • Simulation • Gaming mode
Learning Engagement	
Activities	Pedagogical implications
<u>Role of facilitator:</u> • Engage perspective teachers for making different student-centered approaches model of physics/chemistry lessons in school level. • Provides supportive orientation in making concept map for different topics in physics/chemistry. • The facilitator critiques, comments and summarizes the content connecting with experiences, insights, and reflections of perspective teachers.	• Adopt student-centered approaches in preparing models for physical sciences. • Apply concept mapping strategy in physical sciences for school level classroom. • Engage in the discussion and pose questions to enhance creativity among perspective teachers. • Adopt a simulation mode of teaching lesson in school level. • Active participation of perspective teachers for reviewing research articles related to physical sciences pedagogical approaches • Engage perspective teachers in

<table>
<tr><td></td><td>designing assignment techniques.</td></tr>
<tr><td colspan="2">Resources

Dahal, B. K. (2021). Teaching Physics: A New Trends and Issues to Real Life. Nisha Sharma.

Davar, M. (2012). Teaching of Science. New Delhi: PHI Learning Private Limited.

Kumar, A. (1995). Teaching of physical Sciences, New Delhi: Anmol Publication Pvt. Ltd.

Mohan, R. (2007). Innovative science teaching. New Delhi: Prentice-Hall of India Pvt. Ltd.

Rao, A. (1993). Teaching of Physics. New Delhi: Anmol Publications.

Sood, J. (2009). Teaching of science. New Delhi: Prentice Hall of India.</td></tr>
<tr><td>• Describe physical science laboratory and its importance.
• Explain the basic characteristics of a good physical science laboratory.
• Develop the designs of the models of physical science laboratory.
• List out the basic requirements of planning a physical science laboratory.
• Describe the criteria of laboratory management techniques.
• Develop the physical science laboratory skills.
• Point out the major causes of physical science laboratory accidents and suggest their safety measures.
• Illustrate the importance of the mobile physical science laboratory.</td><td>Unit V: Laboratory and Improvisation of Materials (5pds.)

• Introduction
• Importance of physical science laboratory
• Characteristics of good physical science laboratory
• Planning and designing physical science laboratory
• Laboratory management and its technique
• Physical sciences laboratory skills
• Safety measures in the laboratory
• Common accidents in laboratory and their remedies
• Physical science mobile laboratory
• Teaching aids and improvised</td></tr>
</table>

<table>
<tr><td>Define and explain the construction and importance of improvised instructional materials/aids.
Improvise teaching aids in physical sciences by using low-cost and no-cost materials.</td><td>materials</td></tr>
<tr><td colspan="2">Learning Engagement</td></tr>
<tr><td>Activities</td><td>Pedagogical implications</td></tr>
<tr><td><u>Role of facilitator</u>
Engage perspective teachers in drawing and designing models of physics and chemistry laboratory.
Orient perspective teachers to conduct discussion session.
Encourage active participation in constructing various improvised materials in physics/chemistry.
Using the experiences, perceptions, and reflections of perspective teachers, the facilitator comments, summarizes, and analyzes the content.</td><td>Draw and design various models of physics and chemistry laboratory
Engage in discussion and pose questions related to different aspects of laboratory (e.g., characteristics, design, criteria of laboratory management).
Active participation of perspective teachers in constructing improvised materials and teaching aids for physics and chemistry by using locally available materials and conducting a science fair
Engage perspective teachers in designing assignment techniques.</td></tr>
<tr><td colspan="2">Resources

Mohan, R. (2007). Innovative science teaching. Prentice-Hall of India Pvt. Ltd.

Shivendra, C. (2006). Contemporary Physics teaching. Anmol Publication Pvt. Ltd.

Diberardinis, L. J., Baum, J. S., First, M. W., Gatwood, G. T., & Seth, A. K. (2013).</td></tr>
</table>

Guidelines For laboratory design: Health, safety, and environmental considerations (4th ed.). Wiley Publications.

Hofstein, A., & Lunetta, V. (1982). The role of the laboratory in science teaching: Neglected aspects of research. *Review of educational research, 52(2)*, 201-217.

• Define evaluation. • Describe summative, formative and diagnostic evaluation. • Explain the functions of evaluation. • Prepare models of specification grid. • Discuss attributes of good physical sciences test items • Explain the general steps of test construction. • Construct different test items in physical science courses based on the revised Bloom's taxonomy. • Construct standardized physical sciences test items of different levels. • Calculate discrimination index of test items. • Describe the criteria of item analysis and use them for standardization of test items. • Calculate the item difficulty and discrimination index of physical sciences test items. • Introduce the letter grading system in Nepal.	Unit VI: Evaluation (5 pds.) • Introduction • Types of evaluation • Functions of evaluation • Specification grid • Test items • Attributes of good physics test items • General steps of test construction • Construction of test items based on the revised Bloom's taxonomy • Standardization/ analysis of test • Letter grading system

<table>
<tr><td colspan="2">Learning Engagement</td></tr>
<tr><td>Activities</td><td>• Pedagogical implications</td></tr>
<tr><td><u>Role of facilitator:</u>
• Facilitate perspective teachers in developing model of specification grid for physics and chemistry lessons.
• Provides supportive orientation to make test items following the revised Bloom’s taxonomy.
• Engage the perspective teachers in making a rubric for evaluation of physical sciences.
• Using the experiences, perceptions, and reflections of perspective teachers, the facilitator comments, summarizes, and analyzes the content.</td><td>• Use the model of specification grid for physical sciences in evaluation.
• Active engagement of perspective teachers in making test items in physical sciences topics on the basis of revised Bloom’s taxonomy.
• Active participation of perspective teachers in administering and analyzing of test items related to physical sciences.
• Make a rubric for evaluation of tests.
• Take part in the discussion and pose questions related to relevancy in our context of letter grading system.</td></tr>
<tr><td colspan="2">Resources

Acharya, K. P. (2020). Teaching of Science. New Hira Publications.

Agarwal, P. K. (2018). Retrieval practice & Bloom’s taxonomy: Do perspective teachers need fact knowledge before higher-order learning? Journal of educational psychology.

Bork, D. (2019). A Framework for Teaching Conceptual Modeling and Metamodeling Based on Bloom’s Revised Taxonomy of Educational Objectives.

Dahal, B. K. (2021). Teaching Physics: A New Trends and Issues to Real Life. Nisha</td></tr>
</table>

Sharma.

Note: The figures in the parenthesis indicate the appropriate teaching hours for the respective units.

Part II: Practical Portion

Contents of Experiment/ Practical activities

Students Activities/Contents	Total pds. (45)
Unit I: Nature, Aims and Objectives of Teaching Physical Sciences • Design a discussion session for the issues of physical sciences for sustainable development. • Prepare a report on school -based issues of teaching learning physical sciences. • Write at least 15 instructional/behaviour objectives from lower to higher order thinking based on the Revised Bloom's Taxonomy • Review perceptions and misconceptions of teaching and learning activities and experiences of perspective teachers. • Discus and suggest ways to incorporate pertinent physical science principles in the issues of indigenous knowledge and sustainable development. •	6pds.
Unit II: Physical Sciences Curriculum • Analyze the secondary level physical sciences curriculum in terms of its structure, scope, objectives, organization and strategies. Also assess its strengths and weaknesses critically. Prepare a review report of physical science curriculum • Prepare a sample curriculum of basic level physical science curriculum • Develop a brief report on international initiatives for improvement of	9pds.

physical sciences teaching and learning.	
Unit III: Instructional Design and Planning in Teaching Physical Sciences • Assign students to prepare instructional design for teaching physical science in schools. • Prepare unit plans of Physics/chemistry and present it (any two). • Construct a lesson plan for teaching in Physical sciences based on the Herbartian approach, ABC approach, constructivist approach (5E), problem solving approach, investigative approach, and laboratory approach.	9pds.
Unit IV: Approaches and Strategies in Physical Sciences Pedagogy • Construct different student-centered approaches to the preparation of model in physical sciences lessons. • Design the concept map for teaching any topic of physical sciences. • Make a discussion session for the ideas of developing creativity among perspective teachers in learning physical sciences. • Use simulation mode of teaching physical sciences lesson in secondary level classroom. • Review research articles related to the concept mapping strategy used in teaching physical sciences in about 1500 words and highlight their major findings.	6pds.
Unit V: Physical Sciences Laboratory and Improvisation of Materials • Draw and design various models of the physics/chemistry laboratory. • Conduct a discussion to share the different aspects of physical sciences laboratory (e.g., characteristics, design, criteria of laboratory management). • Construct improvised teaching aids for physics/chemistry using locally available materials and conduct a science fair to explain the working principles and procedure.	6pds.

• Conduct a survey on student's awareness of physical sciences laboratory-based activities, lab safety, accidents and first aid treatment.	
Unit VI: Evaluation • Develop a model specification grid for physical sciences. • Design physical sciences related test item from physics/chemistry lesson for different levels of cognitive domain on basis of revised Bloom's taxonomy. • Administer and calculate the item difficulty and discrimination index for test items prepared above. • Design a rubric for evaluating knowledge and skills in physical sciences.	9pds.

Resources for Practical Activities

Agarwal, P. K. (2018). Retrieval practice & Bloom's taxonomy: Do students need fact knowledge before higher-order learning? *Journal of Educational Psychology*.

Davar, M. (2012). *Teaching of Science.* PHI Learning Private Limited.

Diberardinis, L. J., Baum, J. S., First, M. W., Gatwood, G. T., & Seth, A. K. (2013). *Guidelines forlLaboratory design: Health, safety, and environmental considerations (4th ed.)* Wiley Publications.

Kumar, A. (1995). *Teaching of physical Sciences.* Anmol Publication Pvt. Ltd.

Shivendra, C. (2006). *Contemporary Physics teaching*. Anmol Publication Pvt. Ltd.

Sood, J. (2009). *Teaching of science.* Prentice Hall of India.

Instructional Techniques

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

4.1. General Instructional Techniques

Discussion	Project work
Demonstration	Cooperative and collaborative work
Presentation	Internet (web) surfing
Inquiry	Group work

4.2. Specific Instructional Techniques

Units	Specific Instructional Techniques
I	Classroom presentation on physics and physics education.
II	Curriculum review, and secondary level school curriculum display and reflect on it with comments, develop manuscript by collaboration and discussion.
III	Workshop cum discussion: presentation, participatory activities.
IV	Paper writing and presentation followed by discussion.
V	Presentation by studying the handouts provided by the teacher followed by teachers' suggestions on physics laboratories, field visit of physics and chemistry laboratory and observation made by observation check list, preparation of charts, models, presentations slides.
VI	Presentation by studying the handouts provided by the teacher and makes the report include the suggestions, and reports.

The teachers may decide the project work related to the course work.

5. Evaluation

Evaluation for Theory (Internal Assessment and External Assessment)

Nature of course	Internal Assessment	Semester Examination	Total Marks
Theory	25 Marks	40 Marks	65 Marks

Note: Perspective teachers must pass separately in internal assessment and semester examination.

Internal Evaluation 25 Marks

Internal evaluation will be conducted by the course teacher based on following activities:

1.	Attendance and participation in learning activities (80% compulsory)	5 Marks
2.	First assignment (written assignment)	5 Marks
3.	Second assignment (report writing and presentation)	5 Marks
4.	Third assignment/ Term exam	10 Marks
	Total	25 Marks

Note: *A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)*

First assignment/assessment might be quiz, home assignment etc. according to the nature of the course. The second assignment/assessment might be project work, case study, seminar, survey/field study and individual/group report writing (in about 1500 words), term paper based on secondary data or review of literature and documents etc. and the third assignment will be term exam.

External Evaluation (Final Examination) 40 Marks

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester. The marks distribution will be

Objective questions (Multiple Choice Questions 10 x 1mark)	10 Marks

Subjective short questions (6 questions with 2 'OR 'questions x 5 marks)	30 Marks
Total	Marks

Evaluation for Practical (Internal and External Evaluation)

Nature of course	Internal Evaluation	External Evaluation	Total Marks
Practical	15 Marks	20 Marks	Marks

6.2.1 Internal Evaluation 15 Marks

Internal Practical evaluation will be conducted in the campus/department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

Marks distribution for practical internal evaluation will be as following.

1.	Attendance (80% compulsory)	5Marks
2.	Perspective teachers' portfolios (Record book and Books etc.)	5Marks
3.	Participation, collaborative work and construction of teaching learning resources and planning for teaching learning ***	5 Marks
	Total	15Marks

6.2.2 External Evaluation 20 Marks

External Practical evaluation will be conducted in the campus/department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

Marks distribution for practical external evaluation will be as following.

1.	Records of Experiment/ practical activities	5Marks
2	Records of a science book review and sample science curriculum prepared by individual student	
3.	Records of a sample instructional design, unit plans, lesson plans	5 Marks

	and material development	
4.	Viva-voce	5 Marks
	Total	20 Marks

Note:

Perspective teachers must pass both in internal as well as external assessments of practical examination

A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)

** Practical teaching hours is 3 times more than teaching hours of theory (3x 16 = 48 hours)*

***A group consists of 15 perspective teachers and one teacher will be assigned for a group.*

****Construction of models, charts, teaching aids, develop concept map etc. Also, the collection of materials / designing physics lab, preparation of lesson plan, unit plan, annual plan, preparation of rubrics, developing test items of various levels etc. for teaching learning.*

Eco. Ed. 471: Teaching Economics-I

Semester: First	
Code: Eco. Ed. 471	Full Marks: (65+ 35) =100
Level: Postgraduate Diploma in Education (PGDE)	Credit hrs.: 3
Nature of Course: Theoretical + Practical (2+1)	Teaching hours: (32+ 32) =64

2. Course Description

This course is designed for the three-semester post-graduate diploma in education (PGDE). This is a major course entitled Fundamental Economics Education. It aims to inform the students about pedagogy of economics. Economics is a social science that studies the human behaviour associated with the economic aspect of individuals and society. Moreover, Economics is one of the social science disciplines studied integrated into social studies. So, the knowledge of basic economics and its pedagogy should be meaningful, integrated, value-based, challenging, and active in social studies. In addition, this course also attempts to fulfil the demands of the labour market. Thus, this course provides the pedagogical knowledge required at the school level for teaching social studies. Furthermore, this course also provides more profound skills about the values of Economics studies for the teacher in the social studies classroom.

2. General Objectives of the Course

The general objectives of this course are as follows:

- To enable the students for explaining the concept of economics and economic activities.
- To develop the boarder knowledge on curriculum of Economics.
- To acquaint the students with the taxonomy of objectives and process of curriculum development for school Economics.
- To provide the boarder knowledge and skills on the instructional planning in Economics.
- To formulate the instructional planning in teaching Economics.

3. Specific Objectives and Detail Content of the Course

In order to achieve the expected outcomes of the course, the contents are organized as follows:

<table>
<tr><th colspan="2">Unit I: Basic Concepts of Economics (4Th + 6Pr)=10</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>• Give the meaning of Economics
• Clarify the concept of economic activities
• Discuss the nature and scope of Economics
• Identify the sources of economic data</td><td>2.1 Concept of Economics and economic activities.
2.2 Nature and scope of Economics.
2.3 Sources of economic data.
2.4 Trend of major economic indicators: GDP, GDS, PCI and Inflation Rate.</td></tr>
<tr><th>Activities</th><th>Pedagogical Implications</th></tr>
<tr><td>1. The facilitator will make various groups of students and assign them to draw the meaning of Economics based on definitions of economics given by Adam Smith, Alfred Marshall, and Lionel Robbins.
2. The facilitators will assign the students for Power Point presentations and home assignments on the nature and scope of economics
4. Using various charts, the prospective teacher will demonstrate the various sources of economic data.</td><td>• Developed the ability to critical comments on the meaning of economics based on various definitions.
• Use of various data sources of Economics to analyse the different economic activities in national and international level.</td></tr>
<tr><td colspan="2">Resources

Dewett, K. K. & Navalur, M. H. (2013). Modern economic theory. S. Chand.
MoF. Economic Survey/various issues. MoF.
NRB. Quarterly Economic Bulletin/latest issue. NRB

Ryan S. (2023). 75 Sources of economic data: Statistics, reports, and commentary. https://library.law.yale.edu/news/75-sources-economic-data-statistics-reports-and-commentary
खनाल, बासुदेव, न्यौपाने, भूपेन्द्र , उपाध्याय, मेघराज, खतिवडा, सीताराम र पौडेल, खिमानन्द (२०७८), अर्थशास्त्र I, देउराली प्रकाशन प्रा.लि.।</td></tr>
</table>

<table>
<tr><th colspan="2">Unit II: Economics Education (8Th+9Pr) = 17</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>• Explain the aims and objectives of economics education.
• Describe the importance of economics education and economics of education.
• Highlight the fundamental issues of economics education.
• Show the relationship of economics with economics education and economics of education.</td><td>2.1. Economics Education
2.1.1 Aims and objectives
2.1.2 Importance
2.1.3 Fundamental issues
2.2. Economics of education and its importance
2.3. Relationship of economics with economics education, and economics of education.</td></tr>
<tr><th>Activities</th><th>Pedagogical implications</th></tr>
<tr><td>• Facilitator will provide some learning materials to students and encourage them to write aims and objectives as well as the importance of economics education.
• Group discussion on fundamental issues i.e Child-cantered or teacher-cantered, character development or certificate receiver, activity-oriented or emphasis on individual differences, content-based or activity based etc. of economics education and Present conclusion in the classroom.
• Provide the learning materials to learners and discuss to find the importance of the Economics of Education among peers.
• Divide the class into different groups and the facilitator helps to show the relationship between economics with economics education and economics of education.</td><td>• Differentiate the concept of aims and objectives of economics education.
• Raise fundamental issues of economics education in the Nepalese context on the basis of the global context
• Explain the importance of the economics of education
• Can show the relationship of economics with economics education and economics of education by using charts.</td></tr>
</table>

Resources:

Pokhrel, R. K. (2078). *Methods of Teaching Economics and Teaching Practice*. Dr. Rajendra Kumar Pokhrel.

Sharma, A.(2005). *Teaching of economics*. Surjeet Publication.

Siddiqui, M. H. (1993). *Teaching of economics*. Ashish Publishing House.

कुसियैत, बिनयकुमार (२०६७), *अर्थशास्त्र शिक्षण विधि : शिद्वान्त तथा प्रयोग*। रत्न पुस्तक भण्डार ।

खनाल, बासुदेव, (२०७९), *शिक्षाको अर्थशास्त्र*। बिद्यार्थीपुस्तक भण्डार ।

पौडेल, मिनराज (२०७७), *अर्थशास्त्र शिक्षण विधि*। एम. के. पब्लिसर एण्ड डिष्ट्रिब्युटर ।

Unit III: Curriculum of Economics (6Th +7Pr)= 13

Specific Objectives	Contents
• Give the meaning of curriculum • Describe key feature of subject-centered curriculum design, broad field/integrated curriculum and learner centered design. • Identify the principles of selecting subject matter in Economics curriculum • Explain steps of curriculum development • Analyse the secondary school level economics curriculum • Examine the history of economics curriculum in Nepal	3.1 Meaning of curriculum and curriculum design (subject-centered, broad field/integrated, learner centered design) 3.2 Principles of selecting subject matter in Economics curriculum 3.3 Steps in developing curriculum of economics education 3.3 Analysis of current secondary school economics curriculum 3.3.1 Objective 3.3.2 Content 3.3.3 Scope and sequence. 3.4 History of Economics curriculum in Nepal Practical: Preparation of a model curriculum for teaching economics in school.
Activities	**Pedagogical implications**

• Teacher and students will conduct seminar paper on meaning of curriculum, • Prepare paper on principles of selecting subject-matter in Economics curriculum, • Discussion to analyse the history of secondary level school curriculum and • Project work on history of economics curriculum in Nepal.	• Apply seminar preparation knowledge and skills on curriculum of economics. • Use good practice of selecting subject matter in Economics curriculum. • Develop the knowledge and skills on secondary Level of curriculum. • Develop the efficiency and skills to analyse the existing school level curriculum.

Resources

Print, M. (1993). *Curriculum development and design*. George Allan and Unwin.

Tyler, R.W. (1974). Basic principles of curriculum and instruction. Open University.

कुसियैत, बिनयकुमार (२०६७), *अर्थशास्त्र शिक्षण विधि : शिद्वान्त तथा प्रयोग*। रत्न पुस्तक भण्डार।

पौडेल, मिनराज (२०७७), *अर्थशास्त्र शिक्षण विधि*। एम. के. पब्लिसर एण्ड डिष्ट्रिब्युटर।

पाठ्यक्रम विकास केन्द्र (२०७८), *माध्यमिक शिक्षा पाठ्यक्रम,२०७८ (कक्षा ९ र १०)*।

file:///C:/Users/DELL/Downloads/1672128037%20(1).pdfCDC, (2078 B. S.)

पाठ्यक्रम विकास केन्द्र (२०७८), *माध्यमिक शिक्षा पाठ्यक्रम,२०७८ (कक्षा ११ र १२)*।

http:///*202.45.146.138*elibrary/pages/view.php?ref=*9696*&k=

Unit IV: Taxonomy of Instructional Objectives (4Th +5Pr)=9

Specific Objectives	Contents
• Explain the taxonomy of educational objectives • Discuss the revised Bloom's taxonomy of educational objectives. • Analyse the new taxonomy of educational objective. • Clarify the concept of instructional,	4.1 Taxonomy of educational objectives 4.1.1 Cognitive domain 4.1.2 Affective domain 4.1.3 Psychomotor domain 4.2 Revised Bloom's taxonomy 4.3 New taxonomy of educational objective

educational and behavioural objectives. • Formulate the instructional objectives from different levels of the domain in economics teaching.	4.4 Concept of instructional, educational and behavioural objectives 4.5 Formulation of instructional objective for teaching economics at school
Activities	**Pedagogical implications**
• Facilitator will provide learning resources to the learners ahead of the class, and ask them to review the resources and present their critical understanding in the class of educational taxonomy. • Construct Instructional objectives based on revised Bloom's taxonomy by learners. • Present instructional objectives by the learner individually in the classroom.	• Identifying the educational objectives according to the use of action verbs • Differentiate objectives using in the teaching-learning process • Make instructional objectives from the given problem • Consider higher thinking orders and domains of educational taxonomy while planning, writing behavioral objectives, preparing unit and lesson plans, evaluating teaching and learning activities • Construct the educational objective based on new taxonomy.

Resources

Siddiqui, M. H. (1993). *Teaching of economics*. Ashish Publishing House

Anderson, L. W. and Krathwohl, D. R., et al (Eds.) (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives.* Allyn & Bacon. Boston, MA (Pearson Education Group) https://quincycollege.edu/wp-content/uploads/Anderson-and-Krathwohl_Revised-Blooms-Taxonomy.pdf

Marzano, R. J., & Kendall, J. S. (Eds.). (2006). *The new taxonomy of educational objectives*. Corwin Press. http://dspace.vnbrims.org:13000/xmlui/bitstream/handle/123456789/4604/The-New-taxonomy-of-Educational-Objectives.pdf?sequence=1

कुसियैत, बिनयकुमार (२०६७), *अर्थशास्त्र शिक्षण विधि : शिद्धान्त तथा प्रयोग*। रत्न पुस्तक भण्डार ।

पौडेल, मिनराज (२०७७), *अर्थशास्त्र शिक्षण विधि*। एम. के. पब्लिसर एण्ड डिष्ट्रिब्युटर ।

<table>
<tr><th colspan="2">Unit V: Instructional Design and Planning in Teaching Economics (8Th+7Pr) = 15</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>

Concept of instructional designs
Needs of instructional design in teaching and. Learning at school
Explain and apply ADDIE model in designing and planning instruction for teaching economics education at school
Apply ASSURE model in planning instruction according to school curriculum.
Explain the concepts and importance of instructional planning.
State the concept of the operational calendar, annual work plan, unit plan, and lesson plan
Construct an operational calendar, annual work plan, unit plan and lesson plan in teaching economics.
Describe the importance and uses of the operational calendar, annual work plan, unit plan and lesson plan in teaching economics.

</td><td>
5.1 Instructional designs
5.1.1 Concepts and needs of instructional design.
5.1.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) model
5.1.3 Process/steps: ASSURE (Assess learners, State learning objectives, select methods and materials, utilize methods and media/materials, require learners' participations, and Evaluate and revise)
5.2 Planning Instruction
5.2.1 Concept and importance
5.2.2 Operational calendar
5.2.3 Annual work plan
5.2.4 Unit plan
5.2.5 Lesson plan: components and models (behavioural and constructivist models)
</td></tr>
<tr><th>Activities</th><th>Pedagogical implications</th></tr>
<tr><td>

Conduct small group work for achieving the concept and importance of instructional planning in economics.
Prepare and present of Operational calendar, annual work plan, unit plan, and lesson plan individually by learners in the classroom.

</td><td>

Impart the knowledge and discuss the importance of instructional planning in economics.
Develop skills in making the plan for instructional activities.
Present the role of the efficient head teacher making plans and applying an operational calendar in the school.

</td></tr>
</table>

Recommended books and references

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer.

Brown, A., and Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group

Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc.

Sharma, A. (2005). *Teaching of economics*. Surjeet Publication.

Siddiqui, M. H. (1993). *Teaching of economics*. Ashish Publishing House

Vedanayagam, E.G. (1998). *Teaching technology for college teachers*. Sterling Publisher Pvt. Ltd.

पाठ्यक्रम विकास केन्द्र (२०७८), *माध्यमिक शिक्षा पाठ्यक्रम,२०७८ (कक्षा ९ र १०)*।

file:///C:/Users/DELL/Downloads/1672128037%20(1).pdfCDC, (2078 B. S.)

पाठ्यक्रम विकास केन्द्र (२०७८), *माध्यमिक शिक्षा पाठ्यक्रम,२०७८ (कक्षा ११ र १२)*।

http:///*202.45.146.138*elibrary/pages/view.php?ref=*9696*&k=

Tyler, R.W. (1974). *Basic principles of curriculum and instruction*. Open University.

कुसियैत, बिनयकुमार (२०६७), *अर्थशास्त्र शिक्षण विधि : शिद्वान्त तथा प्रयोग*। रत्न पुस्तक भण्डार ।

पौडेल, मिनराज (२०७७), *अर्थशास्त्र शिक्षण विधि*। एम. के. पब्लिसर एण्ड डिष्ट्रिब्युटर ।

Note: *The figures in the parenthesis indicate the approximate teaching hours for the respective units.*

Part II Practical (32 PR)

Units	**Practical Works**
Unit II: Economics Education (3TH)	1. Writing a reflective essay discussing your journey and experience with economics education. Reflect on how economics education has influenced your understanding of economic concepts and decision-making skills.
Unit III: Curriculum of Economics (10TH)	1. Group work in steps and process of curriculum development 2. Analysis of Current Secondary School Economics Curriculum (grade 9-12) 3. Designing a sample Curriculum of economics for grade nine, including the economy of your local level (Municipality/Rural Municipality) 4. Each student will make presentation on review of school curriculum and sample curriculum

Unit IV: Taxonomy of Instructional Objectives (8TH)	1. Writing instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking skills (Prepare at least 20 objectives), make class presentation and documentations. 2. Writing behavior objectives in affective and psychomotor domain learning (15+15=20 objectives), presentation and documentation 3. Individual student will make presentation in their works in the class
Unit V: Instructional Design and Planning in Teaching Economics (11TH)	1. Prepare a sample instructional design for effective teaching economics at school level and make class presentation. 2. Group work on making Academic Calendar / Operational Calendar. Prepare annual work plan and unit plan 2. Prepare lesson plans (at least 10 lessons) on chosen topics/contents of economics subject of grade 9 and teach at least 2 lessons to their peer in the class.

Note: *The figures in the parenthesis indicate the approximate teaching hours for the respective units.*

4. Modes of Instruction

Teachers can use both general and specific instructional strategies to deliver this curriculum in the classroom. They are as follows:

- ❖ Lecture
- ❖ Group discussion
- ❖ Guest lecture
- ❖ Question-answers
- ❖ Demonstration and Discussion
- ❖ Home assignment and self-study
- ❖ Classroom presentation using
- ❖ Group work/Project work
- ❖ Reflective inquiry
- ❖ Problem-Solving

5. Evaluation

Students' achievements will be evaluated through internal and end/semester examinations. The 65-35 marks are allocated for the theoretical and practical sections, out of which 40 percent

marks are allocated for the internal examination and 60 percent marks for the final/semester examination. Students have to pass both these sections separately.

In the internal evaluation, 25 and 15 marks will be evaluated separately for theory and practical, respectively, by the course teacher based on the following activities:

Activities	**Marks allotted (Th)**
Attendance	3.5
Classroom activities	3.5
First assignment	6
Second assignment	6
Third assignment	6
Total	**25**

Since 15 marks are allotted to internal evaluation for practical, the course teacher will evaluate based on the following heads:

Activities	**Marks allotted (Pr)**
Attendance	5
Developing a model curriculum for teaching economics	5
Performance in instructional design, unitl plan and lesson plan	5
Total	**15**

Student attendance (5), involvement in practical activities (5), and performance in the practical work (5). Internal evaluation marks of practical aspects will be submitted along with the marks of the external practical examination.

5.1 External Evaluation (Final Examination- Theoretical)

Office of the Dean, Faculty of Education, will conduct the final examination at the end of the semester. Sixty percent of the marks have been allotted to the final examination. However, this course comprises both theoretical and practical. Thus, the theoretical aspect has allocated 40 percent marks for the final examination. Both modes of examination need to pass independently,

but the percentage will be counted together. The types and number of questions to be included in the final examination are as follows:

Types of question	**Total questions to be asked**	**Number of questions to be answered and marks allocated**	**Total marks**
Group A: Multiple choice	10 questions	10 X 1 marks	10
Group B: Short answer	6 with 2 'or' questions	6 X 5 marks	30
Total			**40**

5.2 External Evaluation (Practical)

The evaluation of the practical section will be 35 percent marks (15 percent for internal and 20 percent for external examination). The students will survey the pedagogical issues in Economics at the assigned institution and prepare the report for the teacher. The department will manage an external examiner to evaluate reports and conduct Viva Voce. The subject teacher will be the internal examiner.

Activities	**Marks allotted (Pr. External)**
Record of development of a model curriculum	5
Record of preparation of instructional design, annual plan, unit plan and lesson plan	10
Viva-voce	5
Total	**20**

Note:

- *Since 15 marks are allotted to internal evaluation, the course teacher will evaluate based onthe student's attendance (5), involvement in practical activities (5), and performance in the practical work (5). Internal evaluation marks of practical aspects will be submitted along with the marks of the external practical examination.*
- *Students should have compulsorily submitted the assigned project work/task to the department before the final practical examination.*
- *To complete the course, students must secure a minimum pass mark in each component (5.1, 5.2, and 5.3).*

Students should have compulsorily submitted a curriculum review report and field-based pedagogical issue report to the department before the final practical examination. Reports should be submitted individually.

Geo. Ed. 471: Teaching Geography- I

Course No.: Geo. Ed. 471	Nature of the course: Theory + Practical
Level: Postgraduate Diploma in Education (PGDE)	Credit Hours: 3 (Th. 2 + Pr. 1)
Semester: First	Teaching Hours: 64 (Th 32 + Pr 32)

1. Course Description

This course has been designed to provide theoretical and applied knowledge of teaching geography to the prospective teachers. It intends to familiarize them with methods, techniques, and skills essential for teaching geography education at school level. This course includes both theoretical and practical aspects weighting 2 and 1 credit hours respectively.

This course emphasizes on concept and nature of geography education, place of geography contents in school curricula, necessary steps for developing geography curriculum, plans and methods of teaching geography. The preservative teachers who have passed bachelor degree in geography, population studies, rural development, environmental science, geology, sociology, economics and other social sciences are eligible to enroll in this course.

2. General Objectives

The general objectives of this course are to

- familiarize the students with the concept, nature and themes of geography education,
- analyze the place of geography contents in school curricula,
- identify the necessary steps for developing a geography curriculum,
- enable the students to prepare instructional design and instructional plans for teaching geography,
- acquaint the students with methods of teaching geography,

3. Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

Part I: Theoretical Portion

<table>
<tr><th colspan="2">Unit I : Introduction to Geography Education (12)</th></tr>
<tr><th>Specific Objectives</th><th>Contents</th></tr>
<tr><td>Explain the concept, nature and scope of teaching geography
Identify the aims and objectives of teaching geography
Describe the themes of geography
Differentiate between geography and geography education.
Describe the place of geography in school curriculum
Analyze the historical development of geography education in Nepal</td><td>1.1 Concept, nature and scope
1.2 Aim and objectives
1.3 Themes of geography
1.4 Geography and geography education
1.5 Place of geography in school curriculum
1.6 Development of geography education in Nepal</td></tr>
<tr><th>Activities</th><th>Pedagogical Implications</th></tr>
<tr><td>Panel discussion on concept of teaching geography
Group discussion about nature, scope, aims and objectives of geography education.
Preparation of comparative table of geography and geography education
Group work for listing the geography content in school curriculum.
Project work on timeline/development history of geography education.</td><td>Recognize the meaning of geography education.
Make differences between geography and geography education
Develop the knowledge and skills about the place of geography contents in school curriculum.</td></tr>
<tr><td colspan="2">Resources
Aggarawal, J. C. (1998). Principles, Methods and Techniques of teaching. Vikas Publication House.
Ghimire, I. B. (2078). Geography Teaching. Highland Publication.</td></tr>
</table>

Jnawali, D. (1996). *Bhoogol shikshan*. Vidyarthi Pustak Bhandar.

Lambert, D. & Morgan, J. (2010). *Geography: Teaching school subject 11-19*. Rutledge Francis and Taylor Groups.

Panday, R. K. (1992). *Bhoogol Shiksha: Darshan ra Vidhi.* Ratna Pustak Bhandar.

Rao, M.S. (1999). *Teaching of Geography.* Anmol Publications.

Unit II : Curriculum and Textbook of Geography Education (10)

Specific Objectives	Contents
• Introduce geography curriculum. • Identify the elements of curriculum. • Mention the steps of curriculum development • Analyze the secondary level geography curriculum • Design secondary level geography curriculum • Explain the importance of geography textbook. • Mention the elements of a good textbook. • Review geography textbook.	2.1 Geography curriculum and its elements 2.2 Steps of curriculum development 2.3 Analysis of secondary level geography curriculum 2.3.1 Criteria of curriculum analysis 2.4 Design of geography curriculum 2.5 Textbook in geography teaching 2.5.1 Importance of textbook 2.5.2 Elements of a good geography textbook
Activities	**Pedagogical Implications**
• Individual work on elements and principles of curriculum development. • Team work to analyze the secondary level geography curriculum. • Seminar on the development of a model curriculum of secondary level (at least one unit). • Pannal discussion about the elements of good geography textbook. • Project work on review of geography	• Analyze geography curriculum. • Apply the knowledge and skills to develop geography curriculum of secondary level. • Develop the knowledge about the textbook review.

textbook in the secondary level.	

Resources

Curriculum Development Centre (CDC). (2078 *B.S.*). *माध्यमिक शिक्षा पाठ्यक्रम , कक्षा ९- १०*. Curriculum Development Centre.

http:///*202.45.146.138*elibrary/pages/search.php?search=%*21*collection*3791251*

CDC. (2078 B. S.). *माध्यमिक शिक्षा पाठ्यक्रम कक्षा ११-१२*. Curriculum Development Centre.

http:///*202.45.146.138*elibrary/pages/view.php?ref=*9696*&k

Ghimire, I. B. (2078). *Geography Teaching*. Highland Publication.

Jnawali, D. (1996). *Bhoogol shikshan*. Vidyarthi Pustak Bhandar.

Tyler, R.W. (1974). *Basic principles of curriculum and instruction* Open University.

Zais, R.S. (1976). *Curriculum Principles and Foundations.* Harper and Row.

Unit III : Taxonomy of Objectives of Geography Education (8)

Specific Objectives	Contents
• Introduce instructional objectives • Examine the Taxonomy of objectives • Formulate instructional objectives of different domain	3.1 Meaning of instructional objectives 3.2 Taxonomy of instructional objectives 3.3 Formulation of instructional objectives 3.3.1 Cognitive domain 3.3.2 Affective domain 3.3.3 Psychomotor domain 3.4 Practical activities: Writing instructional/behavioral objectives considering cognitive, affective and psychomotor domains as well as higher order of thinking
Activities	**Pedagogical implications**
• Group discussion on taxonomy of objectives • Workshop on formulating instructional objectives in different domains.(lower level and higher level of objectives)	• Apply the taxonomy of objectives in geography teaching. • Consider domains of instructional objectives while designing classroom instruction, preparing lesson plans and constructing tests

Resources

Ghimire, I. B. (2078). *Geography Teaching*. Highland Publication.

Panday, R. K. (1992). *Bhoogol Shiksha: Darshan ra Vidhi.* Ratna Pustak Bhandar.

Zais, R.S. (1976). *Curriculum Principles and Foundations.* Harper and Row.

Unit IV : Instructional Planning in Geography Education (16)

Specific Objectives	Contents
• Concept of instructional designs • Needs of instructional design in teaching and. Learning at school • Explain and apply ADDIE model in designing and planning instruction for teaching geography at school • Explain components of Kemp, Morrison, and Ross's instructional design model • Apply ASSURE model in planning instruction process according to school curriculum • Mention the need and importance of instruction planning • Prepare Academic Calendar, Work plan, Unit plan and Lesson plan	4.1 Instructional designs 4.1.1 Concepts and needs of instructional design 4.1.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) 4.1.3 Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) 4.2 Instructional Planning 4.2.1 Concept of instructional planning 4.2.2 Need for and importance of instructional planning. 4.2.3 Academic calendar 4.2.4 Work plan 4.2.5 Unit Plan 4.2.6 Lesson Plan : components of lesson plan (Behavioral and Constructivist model)
Activities	**Pedagogical Implications**
• Team work on making Academic Calendar / Operational Calendar • Project work on preparation of Work Plan and Unit Plan • Seminar on developing a model lesson plan for teaching geography in secondary	• Apply the knowledge and skills of instructional planning to develop academic calendar / operational calendar. • Design different types of Instructional Planning

<table>
<tr><td>level</td><td></td></tr>
<tr><td colspan="2">Recommended Books and Resources
Branch, R. M. (2009). Instructional design: The ADDIE approach. New York: Springer.
Brown, A., and Green, T. (2016). The essentials of instructional design (Third Edition). New York: Routledge Taylor and Francis Group
Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). Designing effective instruction (eight edition). Danver, MA: John Wiley & Sons, Inc.
Ghimire, I. B. (2078). Geography Teaching. Highland Publication.
Mukharji, S. P. (1970). Geography and Education. Jeewan Jyoti Prakashan.
Panday, R. K. (1992). Bhoogol Shiksha: Darshan ra Vidhi. Ratna Pustak Bhandar.</td></tr>
<tr><td colspan="2">Unit V : Methods of Teaching Geography (18)</td></tr>
<tr><td>Specific Objectives</td><td>Contents</td></tr>
<tr><td>• Discuss the different types of teacher centre methods.
• Apply the various types of student centre methods
• Identify different types of group participatory approach</td><td>5.1 Teacher Centre Methods
5.1.1 Lecture
5.1.2 Demonstration
5.1.3 Question-answer
5.2 Student Centre Methods
5.2.1 Problem solving
5.2.2 Observation
5.2.3 Inquiry
5.2.4 Project work
5.2.5 Field trip/Excursion)
5.2.6 Participatory Approach
• Group discussion
• Buzz session
• Brain storming
• Seminar method</td></tr>
<tr><td>Activities</td><td>Pedagogical Implications</td></tr>
<tr><td>• Group discussion about teacher centre and student centre methods.</td><td>• Use appropriate types of methods for teaching geography contents.</td></tr>
</table>

• Team work on listing the merits and demerits of teacher centre methods. • Panel discussion on merits and demerits of student centre methods. • Project work on conducting participatory approach	• Develop the knowledge and skill for conducting participatory approach.

Resources

Aggarawal, J. C. (1998). *Principles, Methods and Techniques of teaching*. Vikas Publication House.

Ghimire, I. B. (2078). *Geography Teaching*. Highland Publication.

Panday, R. K. (1992). *Bhoogol Shiksha: Darshan ra Vidhi.* Ratna Pustak Bhandar.

Rao, M.S. (1999). *Teaching of Geography.* Anmol Publications.

Part II : Practical Part (32)

Unit	Unit Title	Practical works
II	Curriculum and Textbook of Geography Education (6)	5. Group work and discussion on analysis and review of textbook 6. Review of a textbook of geography textbook of grade 9 7. Group discussion on steps in development of curriculum 8. Prepare a sample/model curriculum of Geography subject of grade 9
III	Taxonomy of Objectives (4)	1. Writing instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking skills (Prepare at least 20 objectives), make class presentation and documentations. 2. Writing behavior objectives in affective and psychomotor domain learning (15+15=20 objectives), presentation and documentation 3. Individual student will make presentation in their works in the class
IV	Instructional Design and	1. Prepare a sample instructional design for effective

	Planning in Geography Education (8)	teaching geography and make class presentation. Group work on making Academic Calendar / Operational Calendar. 2. Individual work on preparation of Work Plan and Unit Plan. (prepare unit plan of at two units of Geography subject of grade 9) 3. Make a model lesson plans (at least 10 lessons) and teach at least 2 lesson plan to their peers.
V	Methods of Teaching Geography (8)	1. Panel discussion on teacher centre and student centre methods. 2. Demonstration and role play for showing techniques of using learner-centered and participatory approach/methods of teaching. 3. Dmonstration and role play of different methods of geography teaching

4. Evaluation

The achievement of the students will be assessed through internal and final/semester examinations. Forty percent marks will be allotted to internal examination and sixty percent for final/semester examination.

4.1 Internal Evaluation

This course contains both theoretical and practical aspects. Total 25 marks (40 percent of 65) are allotted for internal evaluation. Internal evaluation will be conducted by subject teacher based on the following activities:

Activities	**Marks allotted (Th)**
Attendance	3.5
Classroom activities	3.5
First assignment	6
Second assignment	6
Third assignment (Textbook Analysis)	6
Total	**25**

Internal Evaluation of Practical Portion

Similarly, marks scheme for internal evaluation of practical part is as shown below:

1) Attendance 3 Marks
2) Book review and designing a sample curriculum 6 Marks
3) Performance in preparing instruction design, work plan, unit plan and lesson plans 6 Marks

4.2 External Evaluation (Final Examination- Theoretical)

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester. Since this course contains both theoretical and practical aspects, final evaluation of student will be made using both written and practical modes of examination. In both modes of examination students need to pass independently, but percentage will be counted together. Final examination of theoretical teaching will be of 40 marks. The types and number of questions to be included in the final examination of theoretical part are as follows:

Types of question	**Total questions**	**Number of questions and marks**	**Total Marks**
Group A: Multiple choice	10 questions	10 X 1 Marks	10
Group B: Short answer	6 with 2 'or' questions	6 X 5 Marks	30
Total			**40**

4.3 External Evaluation of Practical Part (35 Marks = 20 External + 15 Internal)

Marks scheme for final external evaluation of practical part is as shown below:

1) Records of book review, development of a model curriculum 5 Marks
2) Records of preparation of instructional design, work plan, unit plan and lesson plans 10 Marks
3) Viva Voce 5 Marks

Hist. Ed. 471: Teaching History- I

Course No.: Hist. Ed. 471 Full marks: 100

Nature of course: Theory + Practical

Level: Postgraduate Diploma in Education (PGDE) Credit Hours: 2 Th. + 1 Pr.

Semester: First Total periods: 32 + 32= 64 Hrs.

4. Course Description

This course has been introduced to understand the historiography and history curriculum in secondary school level. It intends to provide the required knowledge of historiography and history curriculum. This course deals with the historiography, curriculum of history, taxonomy of objectives and curriculum. Similarly, it covers the Maxim in history education and instructional planning in history education.

5. General Objectives

The general objectives of this course are as follows.

- To enable the students for explaining the historiography.
- To develop the boarder knowledge on curriculum of history.
- To acquaint the students with the taxonomy of objectives and curriculum.
- To familiarize the students with the Maxim in history education.
- To provide the boarder knowledge and skills on the instructional planning in history education.

6. Specific Objectives and Contents

Unit I: Introduction to the Historiography (5 hours)		
Unit	Specific Objectives	Contents
1	• Understand the Meaning of History • Differentiate the Nature of History • Describe sources of History Writing • Explain Trends of History and History Writing.	1.1 Meaning of History 1.2 Differentiation of the Nature of History 1.3 Sources of History Writing 1.4 Trends of History and History Writing

	Activities	Pedagogical implications
	• Teachers and students will organize groups work to describe the meaning of history, • Discussion on differentiation on the Nature of History, • Collect the of sources of history writing, • Prepare group works for trends of history writing	• Recognize the meaning of history • Make difference between nature of history • Develop the knowledge on history writing
	Resources Adhikari, K.K. (1980). *A brief survey of Nepal History.* Kathmandu: Krishna Kant Adhikari Pub. Gautam, R. (2005). The History of History Writing. New Delhi: ADROT Publishers Majumdar, R.C. (1970). *Historiography in Modern India*. New Delhi: Asia Publishing House.	
	Unit II: Curriculum of History (5)	
Unit	Specific Objectives	Contents
2	• Understand the Meaning of Curriculum • Identify the Principles of selecting Subject matter in History Curriculum • Analyze the History of Secondary Level School Curriculum • Examine the History of Development of History Curriculum in Nepal	2.1 Meaning of Curriculum 2.2 Principles of selecting Subject matter in History Curriculum 2.3 Steps in developing history curriculum for school level 2.4 Analysis of History of Secondary Level School Curriculum 2.4 History of Development of History Curriculum in Nepal

	Activities	Pedagogical implications
	• Teacher and students will conduct seminar paper on meaning of curriculum, • Prepare paper on principles of selecting subject-matter in history curriculum, • Discussion to analyze the history of secondary Level school curriculum and • Project work on designing a sample curriculum of history education for secondary level.	• Apply seminar preparation knowledge and skills on curriculum of history. • Use good practice of selecting subject matter in history curriculum. • Develop the knowledge and skills on secondary Level of curriculum.
	Resources Kochhar, S.K. (1981). *Teaching of history.* Delhi: Sterling Publisher. Upadhaya, S.R. (2053). *Itihasshikshanbidi.* Kathmandu: RatnaPustakBhandar. Print, M. (1993). *Curriculum development and design*. London: George Allan and Unwin. Tyler, R.W. (1974). *Basic principles of curriculum and instruction*. London: Open University.	
	Unit III: Taxonomy of Objectives and Textbook (7)	
Unit	Specific Objectives	Contents
3	• Understanding The Taxonomy of Objectives • Differentiate the Lower Level and Higher Order thinking skills. • Write instructional and behavioral objectives in cognitive, affective and psychomotor domain of learning.	3.1 Understanding the taxonomy of objectives 3.2 Cognitive, affective and psychomotor domains of learning 3.3 Differentiation of lower level and higher level/order thinking objectives 3.4 Writing instructional/behavioral objectives in three domains of learning 3.5 Value of Teaching History

	• Enhance The Value of Teaching History • Analyze The Book and History Textbook • Describe the Qualities of Good History Textbook • Explain the Physical and Academic Aspects of Current History Text Book In Secondary School of Nepal	3.6 Analysis of Book and History Textbook 3.7 Qualities of Good History Textbook 3.8 Physical and Academic Aspects of Current History Textbook in Secondary school of Nepal
	Activities	Pedagogical implications
	• Students will do group work on understanding the taxonomy of objectives, • Individual work on differentiation of lower level and higher order thinking of objectives, • Discussion on value of teaching History, • Point out the differences book and history textbook, • Discussion and presentation on qualities of good history textbook, • Class work review on physical and academic aspects of current history textbook in secondary school of Nepal.	• Apply the ideas of taxonomy of objectives in history teaching. • Use good practice for differentiation of lower level and higher order thinking objectives. • Use knowledge, values and skills to differentiate between books and history textbooks. • Design the good textbook of history. • Develop the knowledge and skills to present academic and physical aspect of books.
	Resources Kochhar, S.K. (1981). *Teaching of history.* Delhi: Sterling Publisher. Upadhaya, S.R. (2053). *Itihasshikshanbidi.* Kathmandu: RatnaPustakBhandar. Print, M. (1993). *Curriculum development and design*. London: George Allan and Unwin. Tyler, R.W. (1974). *Basic principles of curriculum and instruction*. London: Open	

<table>
<tr><td></td><td colspan="2">University.

Sharma, G.N. (1980). School curriculum in Nepal. Kathmandu: Hem Kumari Sharma.</td></tr>
<tr><td></td><td colspan="2">Unit IV: Maxim in History Education (5)</td></tr>
<tr><td>Unit</td><td>Specific Objectives</td><td>Contents</td></tr>
<tr><td>4</td><td>• Understand the Maxim in Education
• Differentiate the Kinds of Maxims
• Explain the Maxims to the Teacher in Teaching</td><td>4.1 Maxim (way) in Education

4.2 Kinds of Maxims (Specially, Known to unknown, Simple to Complex, Particular to General)
4.3 Use of maxims in Teaching</td></tr>
<tr><td></td><td>Activities</td><td>Pedagogical implications</td></tr>
<tr><td></td><td>• Students will conduct panel discussion on maxim in history education,
• Start symposium on kinds of maxims .
• Group work to help of maxims to the teacher in teaching</td><td>• Develop the knowledge and skills from Maxim to teach history education.
• Select the knowledge and skills on different kind of maxim and help of maxim to the teachers in teaching.</td></tr>
<tr><td></td><td colspan="2">Resources

Upadhaya, S.R. (2053). Itihasshikshanbidi. Kathmandu: Ratna Pustak Bhandar.

Sharma, G. N. (1980). School curriculum in Nepal. Kathmandu: Hem Kumari Sharma.

Arthur, M. (1989). The nature of history. London: McMillon Education.

Carr, E.H. (1962). What is history. London: McMillon and Co.</td></tr>
<tr><td></td><td colspan="2">Unit V: Instructional Design and Planning in History Education (10)</td></tr>
<tr><td>Unit</td><td>Specific Objectives</td><td>Contents</td></tr>
<tr><td>5</td><td>• Describe concepts and needs of instructional design in teaching and learning</td><td>5.1 Instructional designs
5.1.1 Concepts and needs of instructional design</td></tr>
</table>

	• Explain and apply ADDIE model in designing and planning instruction for social studies curriculum. • Apply ASSURE model in planning instruction for teaching social studies in schools • Explain the concepts and importance of instructional planning • Understand the Instructional Planning • Describe Academic Calendar • Identify the components of Work Plan • Explain components of Unit and Lesson Plan • Prepare lesson plan	5.1.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) model 5.1.3 Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) 5.2 Instructional Planning 5.2.1 Concepts and importance 5.2.2 Academic Calendar 5.2.3 Work Plan 5.2.4 Unit and 5.2.5 Lesson Plan (Behavioral and constructivist models and samples)
	Activities	Pedagogical implications
	• Students will do group work on instructional planning, • All students of class prepare academic calendar or operational calendar, • Discussion on preparation work plan, • Make a sample unit plan and lesson plan	• Select and design instructional planning in history education like as academic calendar, work plan, unit plan and lesson plan.
	Resources Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer. Brown, A., and Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group	

	Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc. Kochhar, S. K. (1981). *Teaching of history.* Delhi: Sterling Publisher. CDC, (2078 *B.S.*). *माध्यमिकशिक्षापाठ्यक्रम, कक्षा९-१०*.http://*202.45.146.138*/elibrary/pages/search.php?search=%*21*collection*3791251* CDC, (2078 B. S.) *माध्यमिकशिक्षापाठ्यक्रमकक्षा११-१२*.http://*202.45.146.138*/elibrary/pages/view.php?ref=*9696*&k= Tyler, R.W. (1974). *Basic principles of curriculum and instruction*. London: Open University.

Part II

Practical Work (32 Hours)

Se. N.	**Units**	Practical Works
1	Unit I: Introduction to the historiography (4 hours)	2. Individual work on presentation on Trends of history and history writing
2	Unit II: Curriculum of History (6)	1. Group work on principles of selecting subject matter in curriculum and individual presentation. 2. Workshop on development of secondary level history subject curriculum 3. preparation of sample history curriculum for grade 9 4. Presentation of individual student's sample curriculum
3	Unit III: Taxonomy of Objectives and textbook (10)	1. Writing instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking (Prepare at least 20 objectives), making class presentation and documentations. 2. Writing behavior objectives in affective and psychomotor domain learning (10+10=20 objectives), making presentation and documentation

		3. Review of a history book of grade 9 and make presentation.
4	Unit V: Instructional Design and Planning in History Education (12)	1. Group work on model and appropriate sample of instructional design 2. Prepare a sample instructional design for teaching social study subject of grade 9 based on ASSURE model/process 3. Group work and make an academic calendar 4. Individual work and make a work Plan 5. Individual work on unit plan of at least two unit of grade 9 or 10 History Curriculum 6. Group for writing behavioral objectives according to Bloom's taxonomy for lesson plan, 7. Prepare sample lesson plans (at least 10 lessons) on chosen contents of history subject of grade 9 or 10 8. Each student will teach at least 2 lessons to their peer in classroom using their lesson plans

5 Evaluation criteria

5.1 Internal Evaluation 25 (40% off 65)

5.2 25 Theory

Internal evaluation will be conducted by course teacher based on following activities

6) Attendance	3 Marks
7) Participation in Learning activities	2 Marks
8) First assignment	5 Marks
9) Second assignment (Midterm exam) assessment	10 Marks
10) Third assignment/ assessment	5 Marks
Total	25 Marks

5.3 Inter Evaluation 15 % Practical

Internal Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

4) Report of Historical places and school visit	5 Marks
5) Designing sample curriculum	5 Marks
6) Preparing instructional design, unit and lesson plans	15 Marks

Total	15 Marks

6 **External Evaluation 40 (60% of 65) 40 Theory**

Examination Division, Office of the Dean, Faculty of Education will conduct the final examination at the end of the semester. The types and number of questions to be included in the final paper are as follows.

1) Objective type question (multiple choice 10 x 1 point)	10 Marks
2) Short answer question (6 questions x 5 points with 2 or)	30 Marks
Total	40 Marks

6.1 External Evaluation 20 (40% of 35) Practical

External Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, Subject teacher and expert nominated by campus/department chief.

1) Report of Excursion tour and school visit	5Marks
2) Records of sample curriculum development	5 Marks
3) Records of preparation of sample instructional design, unit plan and lesson plans	5 Marks
4) Viva	5 Marks
Total	**20 Marks**

IPM.Ed. 471 Instructional Planning and Management

Semester: First

Code: IPM.Ed. 471 Full Marks: 100

Level: Postgraduate Diploma in Education (PGDE) Credit hrs: 3

Nature of Course: Theoretical + Practical (2Th+1Pr) Teaching hours: 32T+32P = 64

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1. Course Description

This course aims to provide prospective teachers with administrative, management, teaching instructional plans and educational planning. It intends to orient prospective teachers on theoretical and practical bases of instructional planning and management. Contents of the course primarily deal with in reference to school education. Instructional planning and management as an applied discipline support the effective and efficient implementation of instructional plans and planning, strategies and models for instructional planning, school-based plans, instructional management, and focus on instructional planning in major Nepalese education plans. Therefore, this course encourages prospective teachers to have a broader conceptual clarity about the importance of effective instructional planning and management to make the education system efficient and ensure the equitable quality of education.

2. General Objectives

The objectives of this course are as follows:

- To explore the concept of the plan and instructional plan with references to components, instructional objectives, individualized instructional plan and universal design.
- To explain strategies and models for instructional planning.
- To provide support to prepare school-based plans.
- To describe the concept and importance of instructional management with references to inclusive classroom management and universal classroom management strategies.
- To analyze the focus laid on instructional planning in major Nepalese education plans.

3. Specific objectives and contents

Specific objectives	Content
• Clarify the concept and importance of	**Unit one**

the plan and instructional planning • Describe the components of instructional planning • Explain the instructional objectives • State the individualized instructional plan and universal design	**1. Concepts of the plan and instructional planning 10 Hours** 1.1 Concept and importance of the plan and instructional planning 1.2 Components (learning objective, learning assessments and instructional activities) of instructional planning 1.3 Instructional objectives (Revised Taxonomy of education) 1.4 Individualized instructional plan and universal design
Activities • The instructor and prospective teachers both will discuss the process of searching the reading materials from the internet and library. • After collecting reading materials, the instructor presents the content from Power Point. • The instructor will apply a question-answer, group discussion, lecture and group work to create a good participatory environment. • The instructor will divide the class into four groups on the basis of the following contents: Concept and importance of the plan and instructional planning, Components, Instructional objectives, and Individualized instructional plan and universal design. • The prospective teachers will deliver the	**Pedagogical implications** • Help to construct instructional plan and objectives • Prepare prospective teachers to search reading materials from different sources, prepare documents related to content and present them in the classroom.

content through Powerpoint and provide feedback from peers and the instructor.	

References

Combus, P. H. (1970). *What is Education planning*. Paris: International Institute for Education Planning.

Kafle, B. D., Sinnha, R., KaranjIt, R. P., & Dhakal, H. R. (2067). *Educational planning*. Kathmandu: Sunlight Publication.

Karngbeae, L. D., & Kennedy, G. M. (2022). Instructional planning: IIts importance and basic components. *International journal of social science and education research studies, 2*(12), 802-810. doi:https://doi.org/10.55677/ijssers/V02I12Y2022-13

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Marzano, R. J., & Kendall, J. S. (2007). *The new texpnomy of Educational Objectives* (2 Ed.). Thousand Oaks: Corwin Press.

Spencer, S. A. (2011). Universal design for learning: Assistance for teachers in today's inclusive classrooms. *Interdisciplinary journal of teaching and learning, 1*(1), 10-22.

• Explain the strategies for instructional planning • Describe the stages of instructional planning cycle • Elaborate the instructional models design • Elaborate the instructional model designs; five Es model and ADDIE model	**Unit Two: Strategies and Models for Instructional Planning 12 hours** 2.1 Strategies for instructional planning 2.2 Stages of instructional planning cycle (Assessing students' needs, planning instruction, delivering instruction, assessing outcomes, determining students' needs again) 2.3 Instructional models design 2.3.1. Five Es model; Engage, explore, explain, elaborate, evaluate 2.3.2 ADDIE model (Analyze, Design, Develop, Implement, and Evaluate) Practical: Preparing a sample instructional

<table>
<tr><td></td><td>design for classroom instruction of schools</td></tr>
<tr><td>Activities
The instructor will provide learning materials to the prospective teachers in the classroom. These materials are then reviewed by the prospective teachers and a teaching aids is prepared for presentation in the classroom.
The presentation is then followed by question-answer and group discussion.
The instructor observes their presentation and provides feedback for further improvements.
Instructor assigns students to prepare a a sample instructional design using any model of instructional design</td><td>Pedagogical implications
Contribute to use effective instructional strategies and models
Construct different teaching aids
Construct power point, actively participate in classroom for discussion and question-answer</td></tr>
<tr><td colspan="2">References
Branch, R. M. (2009). Instructional design: The ADDIE approach. New York: Springer.
Duran, L. B., & Duran, E. (2004). The 5E instructional model: A learning cycle approach for inquiry-based science teaching. The Science Education Review, 3(2). Retrieved from https://files.eric.ed.gov/fulltext/EJ1058007.pdf
İsman, A., Çaglar, M., Dabaj, F., & Ersozlu, H. (2005). A new model for the world of instructional design: New model. Educational technology, 4(3). Retrieved from https://files.eric.ed.gov/fulltext/EJ1102395.pdf
Malhotra, S. P., Joshi, Vibha, Chaudharu, Sohanvir S. & Sananwal, D. N. (2018). Instructional strategies https://egyankosh.ac.in/bitstream/123456789/46884/1/Unit-11.pdf
Molenda, M. (2015). In search of the elusive ADDIE model. Performance improvement, 54(2), 40–42. doi:10.1002/pfi.21461
Özdilek, Z., & Özkan, M. (2009). The effect of applying elements of instructional desigh on teaching material for the subject of classfication of matter. Educational technology,</td></tr>
</table>

<table>
<tr>
<td>

- Construct annual, instructional, unit, lesson, daily and weekly plans.
- Prepare a model of school improvement plan (SIP)/ school development plan (SDP) and budget plan.

</td>
<td>

Unit Three: School-based Plans 6 Hours

3.1 Annual plan/operational plan

3.2 Annual instructional plan/work plan

3.3 Unit plan

3.4 Lesson plan

3.5 Daily and weekly plan (routine)

3.6 School improvement plan (SIP)/School development plan (SDP)

3.7 Budgetary plan

Practical: Preparation of sample annual plan, work plan, unit plan and lesson plans, and sample budget plan

</td>
</tr>
<tr>
<td>

Activities

- The instructor opens the floor for discussion about the topic of instructional plans in the school system.
- The prospective teachers individually prepare any one instructional plan (Annual plan, Annual instructional plan, Unit plan, Lesson plan, and school improvement plan or school development plan and budget plan) under the guideline of instructor. Then they visit the nearest school to compare their plan with other school.
- Every prospective teachers deliver their own prepared instructional plan in the classroom.
- Instructor delivers the SIP, SDP and budget plan and discusses them in the classroom.

</td>
<td>

Pedagogical implications

- Helps to make necessary instructional plans
- Socialization through interaction with educational institutes
- Skilled on individual and group presentation
- Develop comparative skills

</td>
</tr>
<tr>
<td colspan="2">

References

Bhasin, H. (2021). *ADDIE hand book- Instructional designer's handbook*: Florida State University.

</td>
</tr>
</table>

Kochar, S. K. (1984). *Teaching of social studies* New Delhi: Sterling Publishers Private Limited.

Mangal, S. K., & Mangal, U. (2011). *Teaching social studies*. New Delhi: PHI Learning Private Limited.

Savaage, J. (2015). *Lesson planning: Key concepts and skills for teachers*. London: Routledge.

Shiksha Mantralaya. (2074 BS). *Vidhayalaya sudhar yogana nirman sahayogi pustika 2074*. Bhaktapur: Author.

Shrestha, C. B. (2078). *Teaching practice book: Theory and practice*. Kathmandu: Bidharthi Pustak Bhandar.

Shrestha, C. B., Adhikari, S. P., Ghemire, T., & Mishra, J. (2077). *Financing of education*. Kathmandu: Bhudipuran Prakashan.

Siddiqui, M. H. (2001). *Teaching of economic*. New Delhi: Ashish publishing house

Walker, L. (2008). *The essential guide to lesson planning*. Edinburgh Gate: Pearson Education Limited.

• Clarify the concept and importance of instructional management • Explore the types and strategic of instructional management • Describe the inclusive classroom management • State the universal classroom management strategies for educators	**Unit Four** **4. Instructional management 10 Hours** 4.1 Concept and importance of instructional management 4.2 Types and strategic of instructional management 4.3 Inclusive classroom management (material, instruction, policies and procedures, time, behavior, and layout) 4.4 Universal classroom management strategies for educators (model ideal behavior, students help and establish guideline, rules and regulation, avoid punishing the class, encourage initiative, offer praise, use non-verbal communication, give tangible reward)
Activities	**Pedagogical implication**

• The instructor will search learning resources related to the content and develop the teaching materials which are delivered to the prospective teachers. • Prospective teachers actively participate in the classroom discussion. The instructor and prospective teachers will engage in discussion and question-answer. • Prospective teachers will review books, journal and articles related to the content for preparing individual and group presentation by using teaching materials like; chart and figure. Instructor will provide equal opportunities for presentation in the classroom and provide feedback accordingly after evaluation.	• Contribute to manage inclusive and universal classroom • Skilled on preparing teaching materials on related content.

References

Leiva, M. V., Montecinos, C., Ahumada, L., Campos, F., & Guerra, S. (2016). Novice principals' instructional management practices in high poverty, low performing schools in Chile. *Procedia social and behavioral sciences*, 1-9. Retrieved from https://www.sciencedirect.com/science/article/pii/S1877042817300034

Polirstok, S. (2015). Classroom management strategies for inclusive classrooms. *Science research open access, 6*(10). doi:10.4236/ce.2015.610094

Prieur, J. (2021). 20 Classroom Management Strategies and Techniques. Retrieved from https://www.prodigygame.com/main-en/blog/classroom-management-strategies/

Rahmawati, W. (11 January 2017). The instructional management. Retrieved from https://pascapbi-3a.blogspot.com/2017/01/the-instructional-management.html

• Find out the good education practices of instructional planning in NNEPC (1954AD), NESP (1971-1976 AD), BPEP (1991-2001AD), School sector reform/development plans, and SESP (2023-2030 AD) • Describe the elements of instructional planning	**5. Focus on Instructional Planning in Major Nepalese Education Plans 10 Hours** 5.1 Nepal National Education Planning Commission NNEPC (1954AD), 5.2 National Education System Plan NESP (1971-1976 AD), 5.3 Basic and primary education plan- BPEP (1997 – 2002 AD), 5.4 School sector reform/development plans (2016/17–2022/23), 5.5 School Education Sector Plan -SESP 2022/23-2031/32 (2023-2032 AD)
Activities • The instructor and prospective teachers collect contents from internet and library. • The instructor will provide guideline to the prospective teachers. The prospective teachers focuses on major education plans and programs present in different plans related to educational and instructional documents. • The instructor assigns individual and group presentation in different content to the prospective teachers. The prospective teachers are given equal opportunities in presentation which are evaluated and feedback is given.	**Pedagogical implication** • Helps to get insight for effective instructional planning • Develop experience on extracting related information from bulky materials.

References

The Bureau of Publcations. (2056). *Nepal national education planning commission*. Kathmandu: Author.

Ministry of Education. (2071). *The national education system plan for 1971-76*. Kathmandu: Author

Ministry of Education. (1997). *The basic and primary education master plan for 1997-2002*. Kathmandu: Author.

Ministry of Education. (2016). *School Sector Development Plan 2016/17-2022/23*. Kathmandu: Ministry of Education

Ministry of Education Science and Technology. (2022). *School Education Sector Plan, 2022/23-2031/32*. Kathmandu: Author

Note: The figures in the parenthesis indicate approximate hours allotted to each unit.

Part II Practical (32)

S. N.	**Unit**	Practical Works
1	Unit I: Concepts of the plan and instructional planning (6 hours)	1. Review the documents of instructional planning, lesson planning and prepare note or power point to present in the classroom 2. Prepare at least 15 behavioral/instructional objectives in cognitive, affective and psychomotor domains of learning (Revised Taxonomy of education) 4 Review the documents of individualized instructional plan and universal design. Preparation of note or power point by every individual and present it in the classroom.
2	Unit II: Strategies and Models for Instructional Planning (8 Hours)	1 Panel discussion work on strategies for instructional planning 2 Review relevant literature and make presentation on stages of instructional planning cycle (Assessing students' needs, planning instruction, delivering instruction, assessing outcomes, determining students' needs again). 4 Prepare a sample instructional design based on ADDIE models (Analyze, Design, Develop, Implement, and Evaluate) and present each title in the classroom
3	Unit Three School-based Plans (6 Hours)	1. Divide the groups and send them to school visit then ask them to prepare a group project work on each of

		following titles by each group: Annual plan/operational plan, Annual instructional plan/work plan, Unit plan, Daily and weekly plan (routine), School improvement plan (SIP)/School development plan (SDP), and Budgetary plan 2. Prepare a sample lesson plans (at least 10 plans) 2. Individually prepare a micro lesson plan and teach their peers
4	Unit Four: Instructional management (6 hours)	1 Book and article review on concept and importance of instructional management 2 Individually prepare a note or power point for presentation on types and strategic of instructional management 3 Panel discussion on inclusive and universal classroom management strategies for educators
5	Unit: Five Focus on Instructional Planning in Major Nepalese Education Plans (6 hours)	1 Group work to review each title, prepare separate note or power point and present in the classroom on NNEPC (1954AD), NESP (1971-1976 AD), BPEP (1997 – 2002 AD), SEDP (2016/17–2022/23), and SESP 2022/23-2031/32 (2023-2032 AD)

5. Evaluation criteria

4.5 Internal Evaluation 25 (40% of 65)

Internal evaluation will be conducted by the course teacher based on the following activities

11) Attendance	3 Marks
12) Participation in learning activities	2 Marks
13) First assignment	5 Marks
14) Second assignment (Midterm exam) assessment	10 Marks
15) Third assignment/ assessment	5 Marks
Total	25 Marks

4.6 Inter-Evaluation 15 % Practical

Internal Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

1.	School visit and report writing	5 Marks
2.	Develop a sample instructional design	5 Marks
3.	Preparation of sample annual plan, work plan, unit plan and lesson plan	5 Marks
	Total	15 Marks

4.7 **External Evaluation 40 (60% of 65) 40 Theory**

Examination Division, Office of the Dean, Faculty of Education will conduct the final examination at the end of the semester. The types and number of questions to be included in the final paper are as follows.

3)	Objective type question (multiple choice 10 x 1 point)	10 Marks
4)	Short answer question (6 questions x 5 points with 2 or)	30 Marks
	Total	40 Marks

4.8 External Evaluation 20 (40% of 35) Practical

External Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, Subject teacher and expert nominated by campus/department chief.

4)	Records of school visit and practical works	10 Marks
5)	Records of sample instructional design	5 Marks
6)	Records of sample annual plan, unit plan, lesson plan	5 Marks
	Total	20 Marks

Recommended and References Books

Bhasin, H. (2021). *ADDIE hand book- Instructional designer's handbook*: Florida State University.

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer.

Combus, P. H. (1970). *What is Education planning*. Paris: International Institute for Education Planning.

Duran, L. B., & Duran, E. (2004). The 5E instructional model: A learning cycle approach for inquiry-based science teaching. *The Science Education Review, 3*(2). Retrieved from https://files.eric.ed.gov/fulltext/EJ1058007.pdf

İsman, A., Çaglar, M., Dabaj, F., & Ersozlu, H. (2005). A new model for the world of instructional design: New model. *Educational technology, 4*(3). Retrieved from https://files.eric.ed.gov/fulltext/EJ1102395.pdf

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Lang, M. L. (2019). Planning for differentiated instruction: Instructional leadership practices percevied by administrators and teachers in middle schools. *Educational planning, 26*(2), 29-45.

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Molenda, M. (2015). In search of the elusive ADDIE model. *Performance improvement, 54*(2), 40–42. doi:10.1002/pfi.21461

Özdilek, Z., & Özkan, M. (2009). The effect of applying elements of instructional desigh on teaching material for the subject of classfication of matter. *Educational technology, 8*(1). Retrieved from https://files.eric.ed.gov/fulltext/ED503906.pdf

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Prieur, J. (2021). 20 Classroom Management Strategies and Techniques. Retrieved from https://www.prodigygame.com/main-en/blog/classroom-management-strategies/

Rahmawati, W. (11 January 2017). The instructional management. Retrieved from https://pascapbi-3a.blogspot.com/2017/01/the-instructional-management.html

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Shrestha, C. B. (2078). *Teaching practice book: Theory and practice*. Kathmandu: Bidharthi Pustak Bhandar.

Shrestha, C. B., Adhikari, S. P., Ghemire, T., & Mishra, J. (2077). *Financing of education*. Kathmandu: Bhudipuran Prakashan.

Siddiqui, M. H. (2001). *Teaching of economic*. New Delhi: Ashish publishing house

Spencer, S. A. (2011). Universal design for learning: Assistance for teachers in today's inclusive classrooms. *Interdisciplinary journal of teaching and learning, 1*(1), 10-22.

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Walker, L. (2008). *The essential guide to lesson planning*. Edinburgh Gate: Pearson Education Limited.

Math. Ed. 471: Pedagogy of Mathematics - I

Course Number: Math. Ed. 471 Full Marks: 100

Nature of course: Theory + Practical Period per weeks:

Level: Postgraduate Diploma in Education (PGDE) Total Cr.: 3 (2 Th. +1 Pr.) Credit

Semester: First Teaching Hours: 32 Th. + 32 Pr. = 64

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1. Course Description

Being a student of mathematics education, one should be aware of the major aspects/ areas/ focus of mathematics education. This course is designed for the students to enhance their philosophical aspects of mathematics education as well as practical skills to be competent mathematics teachers of this century. This course begins with a fundamental understanding of different dimensions or foundations of mathematics education, then move to explore the ideas and concepts of different recent learning theories specially designed for mathematics education. After that, this course aims for preparing students as good academic planners. Moreover, this course offers students for developing hands-on skills for the students to prepare appropriate teaching materials in accordance with the corresponding teaching contents of school mathematics and finally, this course also helps students for being reflective practitioners.

2. General Objectives

The following are the general objectives of this course:

- To explore the concept of mathematics education and philosophical aspects of mathematics education.
- To explore the ideas of different recent learning theories and apply them in classroom teaching.
- To develop the skills of designing and implementing different academic plans and activities
- To develop the hands-on skills of developing and using different teaching materials.
- To enable students for being reflective practitioners

3. Course Details

In order to achieve the expected outcome of the course, the contents are organized as follows:

<table>
<tr><td colspan="2">Unit 1: Aspects of Mathematics Education (10 hrs.)</td></tr>
<tr><td>Specific Objectives</td><td>Contents</td></tr>
<tr><td>To envision of mathematics and mathematics education and compare and contrast the philosophical aspects (Absolute, fallible, social constructivist) of mathematics education
To explore the ideas of various pedagogical aspects (transformative, inclusive, critical, digital, STEAM, gender and culturally responsive, flipped pedagogy) of mathematics education
To understand mathematics education as a socially responsive subject.
To explore the skills of using ICT as content, methodology, resources, analyzing, and motivating tools
To explore different curricular aspects of mathematics education
To enable students for understanding the concept of assessment as, for, through learning and different forms of test.</td><td>General introduction of mathematics and mathematics education along with its comparison
Philosophical Aspects (Absolute and fallible)
Pedagogical Aspects
Socio-Cultural Aspects
Technological Aspects
Curricular Aspects
Assessment Aspects</td></tr>
<tr><td>Activities
Facilitator will provide Pre- reading</td><td>Pedagogical Implications</td></tr>
</table>

materials/ documents/ learning resources to the prospective teachers (book chapters and an articles) Facilitator will deliver the contents by using Power Point, followed by question-answer and group discussion method focusing on the application of the contents in school education. • Prospective teachers will take part in class presentation on the given subject matter and critically assess the class presented by their peers. • Facilitator will evaluate the class presentation and provides feedback for further improvements. • Presentation – Students will briefly share their prior understanding individually and the teachers will facilitate and summarize all the ideas. • The group works – Students will work in a group of 4/5 colleagues and discuss their understanding and ideas and share in the classroom. And, finally, a common understanding will be prepared.	• Generate the ideas of using mathematics and mathematics education in classroom teaching-learning and also what are the different between them. • Good practices of absolute, fallible, and social constructivist philosophy in mathematics teaching in the school of Nepal • Apply different teaching pedagogies like: transformative, inclusive, critical, digital, STEAM, gender and culturally responsive, flipped pedagogy in our real mathematics classroom teaching, • Use of mathematics to fulfill the different need in the societies, • Develop the skills of using ICT as content, methodology, resources, analyzing, and motivating tools practically, • Design the praxis driven mathematics curriculum, • Use assessment of learning, for learning and as learning in the actual classroom to the students.
Resources	

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Unit 2: Learning Theories in Mathematics Education (5 hrs.)

Specific Objectives	Contents
• To develop the fundamental concepts and process of learning mathematics according to behaviorism, cognitivism, constructivism, and connectivism. • To enable comparing and contrasting the instructional designs according to behaviorism, cognitivism, constructivism, and connectivism. • To enable students for understanding	Review of learning theories related to teaching mathematics • Behaviorism • Cognitivism • Constructivism (Piaget and • Vygotsky) • Connectivism (Gorge Siaman) • George Polya's Problem-Solving

<table>
<tr><td>and apply the George Polya's Problem-solving method and APOS theory in teaching mathematics.</td><td>method
• APOS theory</td></tr>
<tr><td>Activities
• Facilitator will provide Pre- reading materials Pre- reading documents (book chapters and an articles) and ask students to read them in advance and come up with their understanding and reflection focusing on the following questions: what your understanding about Behaviorism is, Cognitivism, Constructivism, Connectivism, George Polya's Problem-solving method
• and APOS theory?
• Presentation – Students will briefly share their prior understanding individually and the teachers will facilitate and summarize all the ideas.
• The group works – Students will work in a group of 4/5 colleagues and discuss their understanding and ideas and share in the classroom. And, finally, a common understanding will be prepared.</td><td>• Pedagogical Implications
• Apply the behaviorism, cognitivism constructivism and connectivism in mathematics teaching in the classroom,
• Familiarize the George Polya's Problem-solving method and
• using this model, we can solve the different problems.
• Plan and apply the pedagogical activities of APOS theory in mathematics teaching in the classroom.</td></tr>
<tr><td colspan="2">Resources
Acharya, B. R. (2074). Foundation of mathematics education, Kathmandu: DikshantPrakashan.
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</table>

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Unit 3: Bloom's Taxonomy, Instructional Design and Planning in Teaching Mathematics (8 hrs.)

Specific Objectives	**Contents**
• Discuss components and elements of Bloom's and revised Bloom's Taxonomy • Describe relevance of cognitive, affective and psychomotor domains of learning in teaching mathematics • Demonstrate skills to formulate instructional objectives from lower to	Application of Revised Bloom's Taxonomy in teaching mathematics • Cognitive, affective and psychomotor domains of learning • Formulation of instructional objectives from lower to higher order thinking

higher order thinking skills. • Describe concepts of instructional designs • Apply ASSURE model in planning instruction for teaching mathematics according to school curriculum, • To enable the students to construct daily lesson plan and list the components of lesson, • To enable the students to prepare different modules, unit plans and annual plans for teaching-learning as a teacher of mathematics, • To enable the students to prepare an academic calendar.	Instructional designs ▪ Concepts and needs of instructional design, ▪ ASSURE model of instructional design (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) Instructional planning • Academic Calendar • Annual plan • Unit plan • Lesson plan (Behavioral and constructivist models) • Teaching module
Activities • Facilitator will provide learning resources to the prospective teachers ahead of the class, and ask them to review the resources and present their critical understanding in the class. • Facilitator will help design the different plans like academic calendar, lesson plan, unit plan, teaching module and annual plan by using the project work.	Pedagogical Implications • Practically prepare the academic calendar lesson plan, modules, unit plans and annual plans and implement in the educational institution.

• Prospective teachers will take part in class presentation on the given subject matter and critically assess the class presented by their peers. • Facilitator will evaluate the class presentation and provides feedback for further improvements. • Presentation – Students will briefly share their prior understanding individually and the teachers will facilitate and summarize all the ideas. • The group works – Students will work in a group of 4/5 colleagues and discuss their understanding and ideas and share in the classroom. And, finally, a common understanding will be prepared.	
Unit 4: Instructional Material in Teaching Mathematics: Uses and Construction (6 hrs.)	
Specific Objectives	Contents
• To enable for understanding the need of instructional materials and classify the family of instructional materials. • To enable the students to collect, prepare and use different materials (manipulative and audio/ visuals) in teaching mathematics • To enable students in using different mathematical software (Geogebra, SPSS, Mathematica etc.) in teaching	• Manipulative materials • Audio/visuals/ Audio-visuals materials • Mathematical software • Materials modeling -Set -Arithmetic -Algebra -Mensuration -Trigonometry

mathematics • To construct the materials model related to different areas of mathematics • To enable the and students to appraise the status of the present curriculum, textbook.	-Sequence and Series -Mathematics curriculum and textbook appraisal
Activities • Facilitator will provide learning resources to the prospective teachers and ask them to review the resources and present their critical understanding in the class. • Facilitator will help to construct learning materials and explain how these materials use in the different areas of mathematics teaching like Set, Arithmetic, Algebra, Mensuration, Trigonometry, Sequence and Series • The facilitator will give the project work to analyze mathematics curriculum and textbook and ask them to present the group. • The students will work in group and present in the group and finally, common understanding will be developed how to construct and use materials in the classroom and procedure of the curriculum and textbook.	Pedagogical Implications • Classify, collect, prepare and use different materials (manipulative and audio/ visuals) in teaching mathematics and use them in actual classroom teaching. • Use different mathematical software (Geogebra, SPSS, Mathematica etc.) in teaching different contents of mathematics teaching. • Practices the mathematics curriculum and text book analysis on the basis of parameter of curriculum and text book analysis

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Unit 5: Reflective Practices in Mathematics Education (3 hrs.)	

Specific Objectives	**Contents**
• To understand and use Gibb's reflective cycle. • To explore the ideas of reflection before/ during/ after the action • To explore the importance of reflective practices in the teaching-learning process of mathematics.	• Gibbs' reflective cycle • Reflection before/ during/ after the action • Important of reflective practices in mathematics teaching
Activities • Facilitator will provide learning resources to the prospective teachers will send the reading materials (book chapter and articles) and ask students to read them in advance and come up with their understanding and reflection focusing on the following questions: what is the reflective practices practice? and explain the Gibb's reflective cycle. How we can practice reflection before/ during/ after the action? What are important of reflective practices in mathematics teaching? Facilitator will give Project work, conduct discussion and sharing the ideas to each other. • Presentation – Students will briefly share their prior understanding individually and the teachers will facilitate and summarize all the ideas. • The group works – Students will work	Pedagogical Implications • Use Gibb's reflective cycle for practice reflective thinking and show the model • Apply the ideas of reflection before/ during/ after the action in mathematics teaching with clear examples. • Demonstrate the importance of reflective practices in the teaching-learning process and show the model of reflective practices.

in a group of 4/5 colleagues and discuss their understanding and ideas and share in the classroom. And, finally, a common understanding will be prepared.	

Resources

Acharya, B.R., Belbase, S. Kshetree, M.P., Khanal, B., & Panthi, R.K., (2020). Reflective practices in mathematics education. A paper presented in webinar organized by Council for Mathematics Education, National Executive Committee

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Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Part II: Practical Part (32 hrs.)

The practical part of this course is designed for the students to lead them to a good academic planner as a teacher together with a perfect teaching material designer. In doing so, this course allows students to design different academic plans like lesson plans, unit plans, teaching modules, annual plans, and academic calendars. Also, this course offers students to develop hands-on skills to prepare appropriate teaching materials in accordance with the corresponding teaching contents of school mathematics. Also, in the third section of this part, this course encourages students to be reflective practitioners for the betterment of their practices.

The following table describes the details of the practical activities together with the corresponding marks:

S. N.	**Units**	**Practical activities**	**Numbers of Items**	**Marks**	**Description of the activities**
	Unit 3: Instructional Design, Planning in Teaching Mathematics (14 hrs.)	Formulate instructional objectives from lower to higher order thinking for teaching mathematics at school level Preparation of instructional design for effective teaching mathematics in schools	**15** **1**		Discuss and list out actions verbs that can use in formulating instructional objectives in cognitive, affective and psychomotor domains of learning Each student will prepare a sample instructional design using ASSURE model process for teaching school mathematics,
1		Construction of Lesson plan	At least 9 (each at	5	Each student needs to construct at least 3 lesson plans according to the

			least 3)		constructivist, behaviorist, and Cognitivist models. Submit report to the teacher
1		Construction of unit plan	2	2	Each student needs to construct the following items based on the course they will teach: unit plan, teaching module, annual plan, and academic calendar.
2		Development of Module	1	2	
3		Preparation of annual plan	1	1	
		Preparation of academic calendar	1	1	
4	Unit 4: Instructional Material in Teaching Mathematics: Uses and Construction (14 hrs.)	Preparing teaching-learning materials	Including at least 5 teaching materials	5	Each student needs to prepare at least five relevant teaching materials based on the content they will be teaching.
5		Appraisal of mathematics curriculum/ textbook	1	2	Each student needs to submit a critical appraisal of any of the school-level mathematics curriculum/textbooks and submit a report of book review to the teacher
6	Unit 5: Reflective Practices in Mathematics Education (4 hrs.)	Reflection writing project	1	2	Individual and group exercise for reflective practices for improving mathematics teaching Each student must submit a reflection writing project based on their classroom practices.
Total				20 marks	

4. Evaluation Criteria

Criteria	Marks	Remarks
Internal criteria (40%)		
Attendance (80% compulsory)	5	
Class presentation	5	
first assignment	10	
(second assignment)	10	
third assignment	10	
Total	40	
External criteria (60%) External Examination	60	

5. Instructional Techniques

The instructional techniques are specified according to the chapter as follows:

Unit	Chapter	Instructional techniques
I	Dimension of mathematics education	Expository, Discussion, and presentation
II	Different Learning Theories	Expository, Discussion, and presentation
III	Instructional Planning in teaching mathematics	Expository, Project, Discussion and presentation
IV	Instructional material in teaching mathematics: Uses and Construction	Project work, Group work, Presentation
V	Reflective Practices in Mathematics Education	Project work, discussion and sharing

Evaluation

a. External Evaluation

The Office of Controller of Examination, Tribhuvan University will conduct the annual examination at end of the year to evaluate students' performance. The questions of theoretical part in the final examination will contains the question from whole course carrying 80 marks. The types, number and marks of the objective and subjective questions that will be asked in final examination by the Office of the Controller of Examination is as follows:

Types of questions	Total questions	Number of questions & their marks	Total marks
Group A: Multiple choice questions	8 questions	1 × 8 marks	8
Group B: Short answer questions	4 questions (2 question)	4 × 5 marks	20
Group C: Long answer question	1 question (or 1 question)	1 × 12 Marks	12
		Total	40

b. Evaluation Scheme for Practical Part

S N	Practical activities	Numbers of Items	Marks
1	Construction of unit plan and Lesson plan (According to constructivists, behaviorists, and Cognitivist)	At least 9 (each at least 3)	5
1	Construction of visual and	2	2

	audio-visual aids		
2	Development of Module	1	2
3	Preparation of unit plan and lesson plans	1 each	2
4	Reflection writing project	1	2
5	Appraisal of mathematics curriculum/ textbook	1	2
6	Preparing teaching- learning materials	Including at least 5 teaching materials	5
Total			20

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- Acharya, B.R., Belbase, S. Kshetree, M.P., Khanal, B., & Panthi, R.K., (2020). Reflective practices in mathematics education. A paper presented in webinar organized by Council for Mathematics Education, National Executive Committee
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Pop. Ed. 471: Teaching Population- I

Course No.: Pop. Ed. 471 **Nature of Course:** Theoretical

Level: Postgraduate Diploma in Education (PGDE) **Credit Hours:**3 (2Th +1Pr)

Semester: First **Total teaching hours:** 32 Th. +32 Pr. = 64

Course Description

This elective course is designed for the Postgraduate Diploma in Education to develop a general understanding and competencies of prospective teachers on population education. This course provides abroad understanding and concepts of contemporary issues in population education and population situation of Nepal. This course also offers the teaching concepts and skill of education such as, school curriculum of population education/ population studies, taxonomy of instructional objectives in population education, instructional planning in teaching population and teaching on issues of population at local level. The course encourages prospective teachers to use the latest population data and curriculum to conduct instructional processes accordingly. It will suffice the ground for research in emerging population issues.

2. General objectives

The main objective of this course is to provide a broad spectrum of the knowledge, skills, and attitude of prospective teachers to critically assess and identify issues of population and population education. After the completion of a semester, prospective teachers will be able to:

- Develop an understanding of contemporary issues in population and population Education
- Analyze the population situation of Nepal
- Discuss the notion of school curriculum of population education/ population studies
- Explain the taxonomy of instructional objectives in population education
- Describe the population and environment.
- Equip students with basic concepts and skills of instructional design and planning in teaching population
- Acquire the teaching skills on issues of population at local level

3. Course Details

Part I: Theoretical Part (32 hours)

Specific Objectives	Contents
• Draw the concept of population education. • Clarify the concept of fertility, mortality, and migration. • Explain the basic indicators of population and development. • Critically examine the issues of population. • Analyze the dynamics of urbanization and globalization. • Describe concepts, needs and significance of population education, • Analyze objectives and scopes of population education • Elucidate historical trend and development of population education at national and international level	UNIT-I: POPULATION ISSUES AND CONCEPT OF POPULATION EDUCATION (7 Hrs) 1.2 Concept of population components (Fertility, mortality, and migration) 1.3 Basic indicators of population and development: Indicators related to SDGs, life expectancy, total fertility rate, age-sex structure, population growth, net migration, per capita income, HDI, GEM 1.4 Some population-related issues: Demographic dividend, zero population growth, and negative population growth, brain gain and brain drain, human trafficking, urbanization, globalization 1.5 Concept, needs and significance of population education 1.6 Objectives and scopes of population education 1.7 Development of Population Education: An Overview (International and national level)
• Identify the sources of demographic data • Discuss the population distribution, growth • Describe the Population density with special reference to Nepal • Analyze the levels and trends of fertility, mortality, and migration • Analyze the levels and trends of nuptiality • Explain the current population policy in Nepal	UNIT II: POPULATION SITUATION OF NEPAL (5 Hrs) 2.1 Review of sources of population data (census, vital registration, and sample survey) 2.2 Population distribution and growth in terms of ecological and provincial level 2.3 Population density (ecological and province) 2.4 Levels and trends of fertility, mortality and migration 2.5. Level and Trends of Nuptiality 2.6. Review of population policy in Nepal
• Discuss the concept, elements, importance, and principles of curriculum. • Analyze the principles of selecting	UNIT III: SCHOOL CURRICULUM OF POPULATION EDUCATION/ POPULATION STUDIES (6 Hrs) 3.1 Concept, elements, importance, and

subject matter in population curriculum. • Explain the history of population education curriculum in Nepal. • Evaluate the current secondary school population curriculum • Analyze the techniques of text book reviews • *Equipped with the skills* on practice for preparation of a model curriculum for the secondary school	principles of curriculum 3.2 Principles of selecting subject matter in population curriculum 3.3 Steps in developing population education curriculum 3.3 History of population education curriculum in Nepal 3.4 Current school level population education curriculum 3.5 Techniques of textbook reviews 3.6 Hand on practice for preparation of a model curriculum for the school level
• Describe the Taxonomy of educational objectives in population education • Explain the Bloom's taxonomy • Critically examine the new taxonomy of educational objective • Clarify the concept of instructional, educational and behavioral objectives • Explain the process of Formulation of instructional objective in teaching population Education	UNIT IV: TAXONOMY OF INSTRUCTIONAL OBJECTIVES IN POPULATION EDUCATION (6 Hrs) 4.1 Taxonomy of educational objectives in population education 4.2 Bloom's taxonomy and New taxonomy of educational objective 4.4.Concept of digital taxonomy 4.5 Concept of instructional, educational and behavioural objectives 4.6 Formulation of instructional objective in teaching population Practical: Exercise for writing instructional objectives in cognitive, affective and psychomotor domains, and writing lower order to higher order thinking skill objectives
• Concept of instructional designs • Needs of instructional design in teaching and. Learning at school • Explain and apply ADDIE model in desginging and planning instruction for teaching economics education at school • Explain Kemp, Morrison, and Ross's instructional design • Apply ASSURE model in planning instruction according to school curriculum • Formulate of Operational calendar • Prepare Annual work plan • Construct the unit and lesson plan	UNIT V: INSTRUCTIONAL DESIGN AND PLANNING IN TEACHING POPULATION (8 Hrs) 5.1 Instructional designs 5.1.1 Concepts and needs of instructional design, 5.1.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) 5.1.3 Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise)

• Participate the micro-teaching and peer teaching	5.1 Operational calendar 5.2 Annual work plan 5.3 Unit plan 5.4 Lesson plan 5.5. Micro-teaching and peer teaching

Part II : Practical (32 hours)

Unit	**Practical works for skill development**
UNIT-I: Review on the Concepts Population Education (5 hours)	1. Writing a review report on historical development of population education 2. Panel Discussion work on basic indicators of population and development 3. Individual Project work on Ageing/ demographic dividend / zero population growth / negative population growth/ brain gain and brain drain/ human trafficking. 4. Group project work on level and trends of urbanization/ industrialization in world and Nepal
Unit II: Population Situation of Nepal (5 hours)	1. Individual Project work on census Data, vital registration, and sample survey 2. Conduct a case study on population distribution and growth at both the ecological and provincial levels. 3. Arrange a debate or panel discussion in which students adopt varying viewpoints concerning the population density. Provide students with the documents of different periodic plans of Nepal including latest one. Each student will prepare a brief report based on review and analysis of population policies.
UNIT III: School curriculum of population education/	1. Critically review the current text book of population education grade 9-10 prepared by CDC and prepares a

population studies (8 hours)	report on it. 2. Review of models and designs of curriculum development 3. Prepare a sample/model of population education curriculum for grade 9 following steps of curriculum development, and submit a sample curriculum to the teacher
Unit IV: Taxonomy of instructional objectives in population education (6 hours)	1. Writing instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking skills (Prepare at least 20 objectives), make class presentation and documentations. Writing behavior objectives in affective and psychomotor domain learning (15+15=30 objectives), presentation and documentation
UNIT V: Instructional design and planning in teaching population (8hours)	1. Assign students to prepare instructional design for teaching population education b) preparation of annual and unit plan, 2. Ask students to create an operational calendar by including key events, activities, and deadlines over a designated period, aligning with the organization's goals and objectives of Population department. 3. Assign a work to develop an annual work plan for Department of population on determinants of population change, or Key issues of population 4. Ask student to design a unit plan for a population subject of Grade 9 5. Assign the Students to prepare a detailed lesson plans (at least 10 lesson plans) selected contents from grade 9 of population education 6 . Direct the students to present a detailed lesson plan for

	a class session on a chosen topic for a defined period of micro-teaching and peer teaching. **7** Each student will teach at 2 lesson to their peer in the class suing detailed lesson plan

4. Evaluation criteria

4.1 Evaluation for Theory (Internal Assessment and External Assessment)

Nature of course	Internal Assessment	Semester Examination	Total Marks
Theory	25 Marks	40 Marks	65 Marks

Note: Prospective teachers must pass separately in internal assessment and semester examination.

4.2 Internal Evaluation 25 Marks

Theory

Internal evaluation will be conducted by the course teacher based on the following activities:

1.	Attendance and participation in learning activities	5 Marks
2.	First assignment (written assignment)	5 Marks
3.	Second assignment (report writing and presentation)	5 Marks
4.	Third assignment/ Term exam	10 Marks
	Total	25 Marks

Note: *First assignment/assessment might be a quiz, home assignment etc., according to the nature of the course. The second assignment/assessment might be project work, case study, seminar, survey/field study and individual/group report writing, term paper based on secondary data, or review of literature and documents, etc. The third assignment will be a term exam.*

Practical

Internal Evaluation 15 Marks

Internal Practical evaluation will be conducted in the campus/department by the evaluation committee in the chair of the head of the department, subject teacher, and expert nominated by the campus/department chief.

Marks distribution for practical internal evaluation will be as follows.

SN	Description	Marks
1	Report writing on historical development of population education	5Marks
2	Designing a sample curriculum for teaching population education	5 Marks
3.	Preparation of sample instructional designs, annual plan, unit plan and work plan	5Marks
	Total	15Marks

4.3 External Evaluation (Final Examination) 40 Marks

Theorical part

Examination Division, Office of the Dean, Faculty of Education, will conduct the final examination at the end of the semester. The marks distribution will be

Objective questions (Multiple Choice Questions 10 x 1 mark)	10 Marks
Subjective short questions (6 questions with 2 ‘OR ‘questions x 5 marks)	30 Marks
Total	Arks

4.4 Evaluation for Practical (Internal and External Evaluation)

Nature of course	Internal Evaluation	External Evaluation	Total Marks
Practical	15 Marks	20 Marks	Marks

4.6 External Evaluation 20 Marks

External practical evaluation will be conducted in the campus/department by the evaluation committee under the chair of the department head, subject teacher and expert nominated by campus/department chief.

Marks distribution for practical external evaluation will be as follows.

1.	Report of review of historical development of population education	5Marks
2.	Records of sample curriculum for teaching population education	5 Marks
	Records of sample annual plan, unit plan and lesson plans	5 Marks
3.	Viva-voce	5 Marks
	Total	20Marks

Evaluation criteria

Criteria	Marks	Remarks
Internal criteria (40%)		
Attendance (80% compulsory)	5	A score (3, 4 or 5) be provided to prospective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)
Class presentation	5	Each prospective teacher presents a task with the supervision of the facilitator.
Review work/ Materials development (first assignment)*	10	Each student reviews a book/book chapter/ article and prepares a review report in about 1500 words or designs materials for teaching science.
Paper writing/ Materials development (second assignment)	10	Each student writes a reflective paper of 1500 words or design science teaching materials
End-semester exam (third assignment)	10	A test of 20 full marks is taken with the following items: Objective - 10 (weightage of each item 0.5 marks), 3 subjective items (creative type) - 15 (3 marks of each item). The obtained score be halved to covert to the full mark of 10.
Total	40	
External criteria (60%) External Examination	60	Group A: Objective items (10× 1) = 10 Group B: Short answer type items (6× 5) = 30 Two questions be added for choice (given in 'or') Group C: Essay type items (10× 2) = 20 One question be added for choice (given in 'or')

References:

Acharya, P. (2016). *Reference book on population education*. Kathmandu: Gita Rijal.

Adhikari, M.R. (2079).*Foundations of Population Education.* Kathmandu: Pinnacle Publication

Adhikari, M.R.(2010).*Demographic Measures and Techniques.* Kathmandu: Pinnacle Publication.

Adhikari, M.R. & Adhikari, R.(2078).*Population Dynamics.* Kathmandu: Pinnacle Publication.

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Bhende, A. & Kanitkar, T. (2011). *Principles of Population Studies*. Bombay: Himalaya Publishing House Pvt. Ltd.

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Brown, A., and Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group

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Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc.

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Subedi, G. (2011). *Population and Development.* Kathmandu: Kirti Publication.

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ढकाल, सोमनाथ, (२०७०), *जसङ्ख्या शिक्षा शिक्षण विधि,* काठमाडौः रत्न पुस्तक भण्डार।

निउरे, ध्रुव, (....) पाठ्यक्रम ढाँचा, क्लास नोट।

पाठ्यक्रम विकास केन्द्र, (२०७६),*माध्यमिक शिक्षा पाठ्यक्रम ऐच्छिक ९-१० तथा माध्यमिक शिक्षा पाठ्यक्रम जनसङ्ख्या अध्ययन*(११-१२)। भक्तपुरः पाविके।

शिक्षाशास्त्र डीनको कार्यालय, (२०७१), *जनसङ्ख्या शिक्षा स्वाध्ययन सामग्री ।*

Incl. Ed. 471: Assessment of Inclusive Education

Course Code: Incl. Ed. 471	Nature of the Course: Theoretical
Level: Postgraduate Diploma in Education	Credit Hours: 3 (2 Th +1Pr)
Semester: I	Teaching Hours: 32 Th. + 32 Pr. = 64

1. Course Description

The course aims at providing knowledge and skills of different instructional pedagogy in inclusion in different kinds of schools such as special, integrated or inclusive schools. The main target of the course is to flourish the student of PGDE with theoretical as well as practical knowledge essential in catering children with disabilities in their respective schools so that the children and the country will be benefited in the days ahead. The core areas of the course cover the concept and meaning of children with special educational needs, learning styles, learning differences, instructional strategies and teaching methods for sensory and developmental intellectual disabilities. Furthermore, it includes educational support services to educating children with disabilities in Nepal.

2. General Objectives:

The general objectives of the course are:

- To introduce the student's concepts of individual differences and its implication in classroom instruction
- To orient the students about the diverse instructional strategies used for educating students with disabilities
- To familiarize the students with educating techniques used for students with sensory impairments
- To familiarize the students with educating techniques used for students with developmental disabilities
- To provide students with knowledge and skills of service delivery system provided to students with disabilities in Nepal.

3. Specific Objectives and Contents

Part I: Theoretical Part (32 hours)

Specific Objectives	Contents
• Define the concept of individual differences • Describe the areas of learners' differences • Discuss the implications of individual differences in classroom instructions.	**Unit I: Individual Differences of Learners (6 hrs.)** 1.1 Concept of Individual differences 1.2 Individual differences of Learners • Cognitive and Meta-Cognitive Ability • Multiple Intelligence • Learning Style • Learning Pace • Motivation • Maturation/Readiness 1.3 Implications of Individual Differences in Classroom Instructions
• State the concept and principles of UDL • Explain different co-instructional techniques with examples • Explore key areas of instructional differentiation • Clarify the meaning and types of peer-mediated instruction • Elucidate the multi-tier support system for eligibility determination and delivery of services	**Unit II: Instructional Strategies for Inclusion (7hrs.)** 2.1 Universal Design for Learning (Concept and Principles) 2.2 Co-instructional Techniques • One Teach one Assist • Station Teaching • Parallel Teaching • Team Teaching 2.3 Differentiated Instructions: • Content • Process • Product • Learning Environment

Specific Objectives	Contents
	2.4 Peer-Mediated Instructions: • Class-wide Peer Tutoring • Peer Assisted Learning 2.5 Multi-Tier Support System (Eligibility Determination and Delivery of Services)
• Describe the concept of students with sensory impairment • Explain the concept of vision impairment and instructional techniques for students with blindness • Explore different instructional techniques for students with low vision • Explore different instructional techniques for educating children with deafness and hard of hearing • List out assistive technologies used for people with hard of hearing	**Unit III: Educating Students with Sensory Impairments (8 hrs.)** 3.1 Educating Students with Sensory Impairments 3.2 Educating Students with Vision Impairment 3.1.1 Instructional Techniques for Blind • Orientation and Mobility • Braille • Assistive Technology 3.1.2 Instructional Techniques for Low-vision • Large Print Materials • Magnifying Lens • Classroom Setting 3.3 Educating Children with Deafness and Hard of Hearing 3.3.1 Teaching Basic Academic Skills 3.3.2 Modes of Communication: • Sign Language • Oral-aural approach (Oralism) • Total Communication Approach 3.4 Assistive Technology 3.4.1 Hearing Aids 3.4.2 Cochlear Implants

Specific Objectives	Contents
• Describe the concept of developmental disabilities • Familiarize the concept of intellectual disability • Explain the specific areas of difficulties of students with ID and instructional techniques for them • Describe the educational approaches and educational placement for educating students with autism	**Unit IV: Educating Students with Developmental Disabilities (7 hrs.)** 4.1 Concept of Developmental Disabilities 4.2 Educating Students with Intellectual Disabilities 4.2.1 Specific Areas of Difficulties 4.2.2 Instructional Techniques for ID • Curricular Adaptation • Universal Design for Learning • Teaching Methods • Other Adaptations 4.3 Educating Students with Autism 4.3.1. Educational Approaches • TEACCH Approach • Skills Instructions (Language, Communication and Social Development) • Behavioral Analysis and Intervention 4.3.2. Educational Placement: • Collaborative Consultation • Evidence-based Intervention • Community-based Collaboration
• Explain different types of educational services provided to students with disabilities in Nepal • Describe various assessment techniques implemented for students with disabilities • Identify the strategies for professional development of special education	**Unit V: Service Delivery System for Students with Disabilities in Nepal (4 hrs)** 5.1 Educational Services: • Resource Centers • Resource Rooms • Special, Integrated, and Inclusive Schools • Day Care Centers

Specific Objectives	Contents
teachers	• Residential Facilities 5.2 Assessment of Children with Disabilities • Large-scale Assessment • Alternative assessments • IEP-based Assessment 5.3 Teacher Professional Development (TPD) for Special Education Teachers

Note: The figures in the parenthesis indicate the approximate teaching hours for the respective units.

Part II Practical (32)

Course Description

The course aims to equip students with the practical knowledge and skills necessary to promote inclusivity of diverse learners in educational settings. Furthermore, this course provides a comprehensive exploration of key concepts, strategies, and practices essential for creating an inclusive learning environment. Starting with an understanding of inclusive education and its historical development in Nepal, students get engaged in practical tasks such as library research, observation, and reflective analysis. The course explores into creating an inclusive culture by examining policies and fostering parental collaboration. Inclusive curriculum and instruction are incorporated with a focus on differentiated instruction and Universal Design of Learning. The course concludes with an examination of inclusive assessment and an exploration of assistive technological supports. Practical works include essay writing, seminar presentations, case studies, panel discussions, school visits, and workshops, ensuring a holistic understanding of inclusive education policy and practices.

SN.	**Units**	**Practical Works**
1	Unit I: Understanding Inclusive Education (6 hours)	1) Research and write a comprehensive essay (in 1500 words) defining the key concepts of inclusive education and analyzing its philosophy. 2) Visit library or surf internet and map out the historical development of inclusive education in Nepal. Present the finding you detected for class discussion.

		3) Observation and Reflection: Conduct an observation in integrated classroom setting and reflect on the ecological Systems of Inclusive Education influencing the inclusive practices.
2	Unit II: Creating Inclusive Culture in Education (8 hours)	1. Analyze educational policies at the local, provisional and national level related to inclusive culture. Discuss how these policies address the crucial aspects and essential dimensions outlined in Unit II. 2. Develop an action plan for fostering parental collaboration in an inclusive educational environment. Identify specific strategies, communication methods, and initiatives to engage parents in the learning process. 3. Panel discussion work on managing learner's diversity in inclusive setting and presentation
3	Unit III. Inclusive Curriculum and Instruction (6 hours)	1) Panel discussion and class presentation on universal design of learning: Prepare a class presentation on the concept of Universal Design of Learning (UDL) including how UDL can be incorporated into lesson planning. 2) Develop an Inclusive Lesson Plan that incorporates inclusive curriculum concepts and differentiated instruction strategies.
4	Unit IV. Inclusive Assessment (6 hours)	1) School Visit and Observation Report: Organize a visit to a school that emphasizes inclusive education. Ask students to observe and present how inclusive assessment is implemented in the school. 2) Workshop Presentation on inclusive assessment in education: Divide students into 2 or 3 groups and assign each group one subtopic from Unit IV (e.g., approaches, techniques, or issues). Instruct each group to prepare a workshop presentation on their assigned subtopic.

5	Unit V: Assistive Technological Supports for Inclusive Education (6 hours)	1) Group Discussion on the concept, types and principles of assistive technology supports. Teacher will facilitate a group discussion where students can share their perspectives, insights, and potential challenges related to incorporating assistive technology in inclusive education. 2) Essay Writing on the models of assistive technology (HAAT and SETT models). 3) Group work and presentation on the models of assistive technology (HAAT and SETT models). Each student or group can prepare a presentation highlighting the key components, principles, and practical applications of the assigned model. 4) Seminar Presentation on the use of assistive aids in inclusive management, focusing on communication aids, daily living aids, ergonomic aids, and the use of ICT for inclusion.

4. Instructional Techniques: In this course both general and specific instructional techniques will be used to deliver the contents

4.1 General Instructional Techniques:

- Guest lecture by resource person
- Class discussion
- Presentation
- Group work/pair work
- Project work
- Self-study
- Brain storming

4.2 Specific Instructional Techniques:

Unit	***Specific activity***
II	**Individual Activity:** - The student-teacher will visit a school (special, integrated or inclusive). - Each student-teacher will choose a child with disability (any type and any

	grade). - Observe the activities of the child at least 3 times (any subject). - Discuss with the subject teacher and on the basis of observation the student will a report. - The student will present the report in the class followed by discussion and teacher's feedback.
III-V	**Group Activity:** - Students will be divided into groups (3-5 members in each). - Each group will visit only one: institution/special school/resource class/residential school/inclusive school/integrated school etc. - Each group will observe the whole school system considering the needs and available facilities with regard to children with disabilities - Each group will prepare a case study report in a formal format. - Then, each group will present the report in class followed by discussion and teacher's feedback.
V	**Activity in Pairs:** - Students will be paired by lottery. - Each pair will visit own local municipality and find out the policies, programs, services and facilities provided by the local government for the education of children with disabilities. - Each pair will prepare a report and present in the class followed by discussion and teacher's feedback.

5. Evaluation Scheme

Students will be evaluated in two phases i) internal evaluation by the concerned teacher through midterm class test, paper presentation, assignments, project work and workshops, attendance, participation and viva and ii) final annual examination by the office of the controller of examinations. The students must pass both the internal and the end- semester examinations separately. The absent student in internal evaluation cannot attend the end-semester examination.

The grades awarded to a student in a course are based on performance in both these types of evaluations. The weightage is defined as:

Internal Evaluation (theory)– 25%

Internal Evaluation (practical)- 15%

External Evaluation Theory – 40%

External Evaluation Practical – 20%

Internal Evaluation (theory) Criteria:

- Regularity in the class 5%
- Review of books and development lesson plan etc. 5%
- One term paper/essay/project work 10%
- Individual Written Test 5 %
- **Total** **25%**

External Evaluation Criteria:

Students are required to participate in end-semester-examination. The types and number of questions to be included in the test are as follows:

Objective questions (Multiple Choice Questions 10 x 1 mark)	10 Marks
Subjective short questions (6 questions with 2 'OR 'questions x 5 marks)	30 Marks
Total	40 Marks

Recommended Books and/ References

Best, S. J., Heller, K. W., & Bigge, J. L. (2010). *Teaching individual with physical or multiple disabilities* (6th edition). USA: Pearson Education, Inc.

Gargiulo, R. M., & Metcalf, D. (2013). Teaching in today's inclusive classrooms (2nd edition). USA: Wadsworth, Cengage Learning.

Heward, W. L. (2013). Exceptional children: An introduction to special education (10th edition). USA: Pearson Education, Inc.

Mastropieri, M. A., & Scruggs, T. E. (2018). The inclusive classroom: Strategies for effective differentiated instruction (6th edition). USA: Pearson Education, Inc.

Reid, G. (2009). Learning Styles and Inclusion. USA: Sage Publications Inc.

Smith, T.E.C., Polloway, E.A., Patton, J. R., & Dowdy, C. A. (2012). Teaching Students with Special Needs in Inclusive Settings (6th Ed.). USA: Pearson.

Westwood, P. (2011). Commonsense Methods for Children with Special Educational Needs. (6th ed.), London: Routledge Falmer, Taylor & Francis Group.

Eng. Ed. 471: Theory and Practice in Language Pedagogy

Course No.: Eng. Ed. 471 **Nature of Course:** Theoretical+ Practical

Level: Postgraduate Diploma in Education (PGDE) **Credit hours:** 3 (2 Th. + 1 Pr.)

Semester: First **Total teaching hours:** 32 Th. + 32 Pr. = 64

Course Description

This is a pedagogical course designed for the students specializing in English at Postgraduate Diploma level in Education with a view to developing the fundamental theoretical insights in language pedagogy and practical skills needed to work as a language teacher. This course provides an understanding on the fundamental concepts as well as methods applicable in ESL/EFL programs at school level, offers insights for teaching various language aspects and skills, and gives the ideas for preparing instructional materials and plans.

Objectives

The general objective of the course is to familiarize the students with the fundamental principles and methods of teaching employed in ESL/EFL programs at school level, ideas for teaching various language skills and aspects along with classroom management, instructional materials. More precisely, at the end of the semester this course enables the students to:

- develop a clear perspective regarding language learning and teaching, then develop confidence in English language teaching,
- explain the various methods employed in language teaching,
- develop ideas of the basic language skills and gain competence in teaching the four language skills at school level
- be familiarized with the basic aspects of language, and then develop the competence in teaching the aspects of English at school level
- be acquainted with the idea of classroom management, instructional materials and planning needed for language teaching.

Course Details

Part I: Theoretical Part

Unit I – Language Learning: Principles and Perspectives (10 hours)	
Specific Objectives	**Contents**

• Introduce language learning and teaching • Describe motivation in language learning and distinguish intrinsic motivation from extrinsic motivation • Differentiate language acquisition from language learning • Explain the theoretical issues in first language acquisition • Explain the theoretical perspectives on second language acquisition • Distinguish foreign language learning from second language acquisition • Explain the biological arguments in language learning • Explain the concept of communicative competence and show its relevance in second language education • Describe the general principles of teaching English as an international language	• Language, language learning and teaching • Motivation in language learning: Meaning, types (Intrinsic and Extrinsic); motivational Intensity • Acquisition and learning • Issues in first language acquisition ➢ Competence and Performance ➢ Comprehension and Production ➢ Nature or Nurture ➢ Universals ➢ Systematicity and Variability ➢ Imitation; Practice and Frequency ➢ Input ➢ Discourse • Perspectives on second language acquisition ➢ Structural Linguistics and Behavioral Psychology ➢ Generative Linguistics and Cognitive Psychology ➢ Constructivism • "Second" and "Foreign" language acquisition/learning • Biological and Age-related arguments in language learning ➢ The critical period hypothesis ➢ hemispheric lateralization

	➢ Left-brain and right-brain dominance • Communicative competence: meaning and components (Canale and Swain's Framework) • Principles of Teaching English as an International Language
Activities	**Pedagogical implications**
• Course facilitator will supply the learning materials (resources) to the course participants (prospective teachers) prior to the class, then instruct them to study and grasp the contents (main points) therein. They will be instructed to present their critical understanding of the contents in the class. • Course facilitator will deliver the contents using Power Point slides or any other way of displaying the contents as appropriate, followed by question-answer & discussion, with emphasis on the application of the contents in school level teaching-learning. • Course participants will take part in class presentation delivered by the facilitator on the given contents and closely observe and assess the class	• Apply the fundamental principles of language learning and teaching in classroom practice, with a clear understanding of language, language learning and acquisition • Be acquainted with the differences between first language, second language, foreign language, recognize how learning the language of one kind differs from other, and develop insights for teaching English accordingly • Recognize the concept of communicative competence and its components, and develop the insight for applying it in teaching English • Recognize the importance of critical period and hemispheric lateralization in language learning/acquisition and these ideas in teaching-learning

presented by their peers. • Facilitator will evaluate the class presentations done by the course participants and provide feedback for further improvement as required.	

Resources

Alsagoff, Lubna; McKay, Sandra Lee; Hu, Guangwei; and Renandya, Willy A. (Eds). 2012. *Principles and Practices for Teaching English as an International Language.* New York: Routledge.

Brown, H. Douglas. 2014. *Principles of Language Learning and Teaching.* New York. Pearson Education.

Harmer, Jeremy. 2007. *How To Teach English.* Edinburgh: Pearson Education Limited.

Richards, Jack C, and Renandya, Willy A (Eds). 2002. *Methodology in Language Teaching.* Cambridge: John Flowerdew and Lindsay Miller.

Unit II – Bloom's Taxonomy, Methods and approaches to language teaching (10 hours)

Specific Objectives	Contents
• Describe cognitive, affective and psychomotor domains of learning. • Prepare instructional objectives in cognitive, affective, and psychomotor domain of learning. • Demonstrate skills for writing instructional objectives ranging from lower to higher order thinking skills • Discuss the characteristics of the grammar translation method, direct method, and communicative language teaching, and identify their advantages and shortcomings	• Revised Bloom's Taxonomy of Educational Objectives (Concept, cognitive, affective and psychomotor domains of learning) • Writing instructional objectives ranging from lower to higher order thinking skills • Grammar Translation Method • Direct Method • Audiolingual Method • Communicative Language Teaching • The Natural Approach • Community Language Learning • Total Physical Response

• Discuss the natural approach and differentiate it from other approaches in second language teaching-learning • Describe the processes of teaching involved in community language learning, total physical response, and task-based language teaching and show their relevance in teaching English as a second/foreign language	• Content-based approach • Task-Based Language Teaching • Cooperative learning
Activities	**Pedagogical implications**
• Course facilitator will supply the learning materials (resources) to the course participants (prospective teachers) prior to the class, then instruct them to study and grasp the contents (main points) therein. They will be instructed to present their critical understanding of the contents in the class. • Course facilitator will deliver the contents using Power Point slides or any other way of displaying the contents as appropriate, followed by question-answer & discussion, with emphasis on the application of the contents in school level teaching-learning. • Course participants will take part in class presentation delivered by the	• Apply the techniques of grammar-translation method, direct method and audiolingual method in the teaching of English as per the need • Assess the principles of the natural approach to language teaching and make judgment for applying them in the teaching of English if needed. • Apply the techniques and processes of teaching involved in community language learning, total physical response, and task-based language teaching, based on their judicious assessment as per need • Design the appropriate techniques, principles and procedure of language teaching after gaining insights from the various methods studied in this unit

facilitator on the given contents and closely observe and assess the class presented by their peers. • Facilitator will evaluate the class presentations done by the course participants and provide feedback for further improvement as required.	

Resources

Brown, H. Douglas. 2014. Principles of Language Learning and Teaching. New York. Pearson Education.

Harmer, Jeremy. 2007. How To Teach English. Edinburgh: Pearson Education Limited.

Larsen-Freeman, Diane. 2000. *Techniques and Principles in Language Teaching*. Oxford: Oxford University Press.

Norland, Deborah L. and Terry Pruett-Said. 2006. *A Kaleidoscope of Models and Strategies for Teaching English to Speakers of Other Languages*. Libraries Unlimited.

Richards, Jack C, and Renandya, Willy A (Eds). 2002. Methodology in Language Teaching. Cambridge: John Flowerdew and Lindsay Miller.

Unit III – Teaching Language Skills (9 hours)

Specific Objectives	Contents
• Define listening skill and give reasons for teaching listening • Describe the types of listening and mention the sources of listening materials • Describe the principles of teaching listening • Define speaking skill and point out the reasons for teaching speaking • Describe the activities of teaching	• Teaching listening ➢ Reasons for teaching listening ➢ Intensive and extensive listening ➢ Listening sources – live and recorded ➢ Listening skills ➢ Principles of teaching listening • Teaching speaking ➢ Reasons for teaching speaking

speaking • Discuss the teacher's role while teaching speaking • Define reading and explain the reasons for teaching reading • Distinguish intensive reading from extensive reading, and discuss their uses • Distinguish authentic reading from simplified reading and point out their uses and benefits • Recognize the skills involved in reading skill • Define writing skill and discuss the reasons for teaching writing • Describe the process involved in writing • Describe the steps followed in report writing • Discuss the correction of written works and handwriting	➢ Some speaking activities – information gap activities, Storytelling; Describing favourite objects; Meeting and greeting; Student presentation ➢ Correcting speaking ➢ Teacher's role while teaching speaking • Teaching reading skill ➢ Reasons for reading ➢ Extensive and Intensive reading ➢ Authentic and simplified reading ➢ Reading skills – scanning, skimming, detailed understanding ➢ Reading principles • Teaching writing skill ➢ Reasons for writing ➢ Writing process ➢ 6-steps for report writing ➢ Correcting written work ➢ Handwriting
Activities	**Pedagogical implications**
• Course facilitator will supply the learning materials (resources) to the course participants (prospective teachers) prior to the class, then instruct them to study and grasp the contents (main points) therein. They will be	• Follow the appropriate principles and procedures while teaching listening skill • Apply the appropriate activities and processes for the teaching of speaking skill in English at school level • Make corrections in the case of errors in

instructed to present their critical understanding of the contents in the class. • Course facilitator will deliver the contents using Power Point slides or any other way of displaying the contents as appropriate, followed by question-answer & discussion, with emphasis on the application of the contents in school level teaching-learning. • Course participants will take part in class presentation delivered by the facilitator on the given contents and closely observe and assess the class presented by their peers. • Facilitator will evaluate the class presentations done by the course participants and provide feedback for further improvement as required.	students' speaking • Design extensive and intensive types of reading activities in the teaching of reading, using authentic and simplified materials • Design and implement the activities of scanning, skimming and detailed understanding in the teaching of reading • Develop simplified reading texts from the original ones in teaching reading • Teach writing skill by apply the appropriate steps at school level • Make correction in the written works produced by students and give feedback to them as needed

Resources

Harmer, Jeremy. 2007. *How to Teach English.* Edinburgh: Pearson Education Limited.

Haycraft, John. 1978. *An Introduction to English Language Teaching.* Harlow: Longman.

Renandya, Willy A.; Widodo, Handoyo Puji (Eds). 2016. *English Language Teaching Today: Linking Theory and Practice.* Switzerland: Springer International.

Unit IV – Teaching Language Aspects (7 hours)

Specific Objectives	Contents
• Define vocabulary size and coverage,	• Teaching vocabulary

and estimate how much vocabulary EFL learners know • Explain how vocabulary items are prioritized in teaching a foreign language • Explain how vocabulary can be learned outside the classroom • Describe the teaching of language functions • Describe the teaching of grammar • Describe the teaching of pronunciation	➢ Vocabulary Size and Coverage ➢ How Much Vocabulary Do EFL Learners Know? ➢ Choosing Words to Be Learned in an English Language Learning Programme ➢ Nation's model of incorporating vocabulary component in a course ➢ Vocabulary Learning Outside Classroom • Teaching language functions • Teaching grammar • Teaching pronunciation
Activities	**Pedagogical implications**
• Course facilitator will supply the learning materials (resources) to the course participants (prospective teachers) prior to the class, then instruct them to study and grasp the contents (main points) therein. They will be instructed to present their critical understanding of the contents in the class. • Course facilitator will deliver the contents using Power Point slides or any other way of displaying the contents as appropriate, followed by question-answer & discussion, with emphasis on the application of the	• Decide the words to be prioritized for learning in teaching English as a foreign language • Teach English vocabulary applying the appropriate techniques and activities at school level • Teach English grammar applying the appropriate methods and techniques at school level • Teach English pronunciation at school level • Teaching English language function with appropriate exemplification at school level • Teach the English prose and poems of appropriate length and difficulty level

contents in school level teaching-learning. • Course participants will take part in class presentation delivered by the facilitator on the given contents and closely observe and assess the class presented by their peers. • Facilitator will evaluate the class presentations done by the course participants and provide feedback for further improvement as required.	

Resources

Harmer, Jeremy. 2007. How to Teach English. Edinburgh: Pearson Education Limited.

Haycraft, John. 1978. *An Introduction to English Language Teaching.* Harlow: Longman.

Renandya, Willy A.; Widodo, Handoyo Puji (Eds). 2016. *English Language Teaching Today: Linking Theory and Practice.* Switzerland: Springer International.

Richards, Jack C, and Renandya, Willy A (Eds). 2002. Methodology in Language Teaching. Cambridge: John Flowerdew and Lindsay Miller.

Unit V – Instructional Planning, Materials and Classroom Management (13 hours)

Specific Objectives	Contents
• Describe concept of instructional design • Analyze and explain ADDIE and ASSURE models of instructional design. • Prepare a sample instructional design following process and steps of ASSURE model for teaching English in schools	➢ Instructional design ➢ Concept ➢ Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) model and Kemp, Morrison, and Ross's instructional design ➢ Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize

• Describe various instructional equipment and materials used in classroom teaching • Introduce the concept of classroom management and important activities performed by teacher in the class • Discuss the reasons for planning lessons, and introduce plan formats	methods and media/materials, Require learners' participations, and Evaluate and revise) • Taxonomy of educational objectives: Cognitive, affective and psychomotor domains of learning • Classroom equipment, Materials and technology ➢ The board ➢ Picture and word cards ➢ Flip charts ➢ Dictionaries ➢ The overhead projector ➢ Computer-based technologies and programs ➢ Audio-videos; Audio-visual aids ➢ Flashcard, chart, pocket chart, cut-outs, matchstick figures • Classroom management ➢ The teacher in the classroom ➢ Using the voice ➢ Talking to students ➢ Giving instructions ➢ Student talk and teacher talk ➢ Using the L1 ➢ Seating arrangements ➢ Student groupings • Planning Lessons

	➢ Reasons for planning ➢ Plan formats ➢ Essential components: Teaching item, objectives, materials, activities, evaluation, homework ➢ Behavioral model of lesson plan ➢ Constructivist model of lesson plan • Annual Plan, Work Plan and Unit Plan
Activities	**Pedagogical implications**
• Course facilitator will supply the learning materials (resources) to the course participants (prospective teachers) prior to the class, then instruct them to study and grasp the contents (main points) therein. They will be instructed to present their critical understanding of the contents in the class. • Course facilitator will deliver the contents using Power Point slides or any other way of displaying the contents as appropriate, followed by question-answer & discussion, with emphasis on the application of the contents in school level teaching-learning. • Course participants will take part in class presentation delivered by the facilitator on the given contents and	• Collect, select and develop instructional materials to meet the purpose of teaching – identifying how they are usable for language teaching purpose • Manage the class by establishing appropriate classroom norms, and conduct appropriate role in teaching • Make lesson plans for teaching various skills and aspects of the English language

closely observe and assess the class presented by their peers. • Facilitator will evaluate the class presentations done by the course participants and provide feedback for further improvement as required.	

Resources

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer.

Brown, A., and Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group

Morrison, G.R., Ross, S.M., Morrison, J.R., and Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc.

Harmer, Jeremy. 2007. How To Teach English. Edinburgh: Pearson Education Limited.

Haycraft, John. 1978. *An Introduction to English Language Teaching.* Harlow: Longman.

Richards, Jack C, and Renandya, Willy A (Eds). 2002. Methodology in Language Teaching. Cambridge: John Flowerdew and Lindsay Miller.

Part Two: Practical (32 hrs.)

S. N.	Units	Practical Works for skill development
1	Unit I: Language Learning: Principles and Perspectives (8 hours)	1. Book Review: Review of a book on theory, principle or method of language teaching or learning 2. Individual student's presentation on a review of book in the class
2	Unit II: Bloom's Taxonomy, Methods and approaches to language teaching (5	• Writing instructional/behaviroual objectives in cognitive domain of learning from lower to higher order thinking (Prepare at least 20 objectives) class presentation and documentations.

	hours)	• Writing behavior objectives in affective and psychomotor domain learning (15+15=30 objectives), presentation and documentation • Panel Discussion on the differences between the grammar translation method, direct method and communicative approach to language teaching • Select topic, appropriate teaching methods and make plan for teaching based on textbook of English (Grade 8-10), and each student will demonstrate translation methods, direct methods and learner centered/communicative approach, cooperative learning approach etc.
3	Unit III: Teaching Language Skills (5 hours)	2. Panel discussion on the importance of teaching reading skill at secondary level 3. Students will select appropriate and prepare plan about how to teach listening skills for school students, some students will demonstrate appropriate techniques of teaching listening skills. 4. Students will select appropriate method and prepare plan about how to teach reading skills for school students, some students will demonstrate appropriate techniques of teaching listening skills 5. Students will select appropriate method and prepare plan about how to teach reading skills for school students, some students will demonstrate appropriate techniques of teaching reading skills 6. Students will select appropriate method and prepare plan about how to teach writing skills for school students, some students will demonstrate appropriate techniques of teaching writing skills 7. Student will visit schools and observe class, and

		Collect students' free writing products from secondary level classes (9-10), and correcting the erroneous writing.
4	Unit IV: Teaching Language Aspects (4 hours)	1. Class observation: Observation report on the activities for practicing grammar, vocabulary, pronunciation, speaking and reading comprehension by teachers at school level (observation of 3 teachers) 2. Book review: Review of a book on vocabulary teaching and learning
5	Unit V: Classroom Management, Planning and Materials (5 hours)	1. Making lesson plans for teaching of reading comprehension, writing composition, grammar, pronunciation, word-meaning, communicative function (at least 3 for each) using behavioural and constructivist models of lesson plans, making class presentation and documentation 2. Construction of teaching materials for teaching various language skills and aspects (as specified in theoretical section)
6	Unit VI: Literature in Language Teaching (4 hours)	1. Panel discussion on the cultural problems in understanding literature and strategies for addressing them

6. Evaluation criteria

Criteria	**Marks**	**Remarks**
Internal evaluation (40%)		
Theory (25 marks)		
Attendance (80% compulsory)	3	Score will be provided to students (1, 2 or 3) based on attendance: 80-85% = 1; 86-95% = 2; above 95% = 3)

Class presentation	2	Each student will present at least one lesson with the supervision of the facilitator.
Review work (first assignment)*	5	Each student will review a book/book chapter/ article and prepare review report in about 1000 running words.
Paper writing (second assignment)**	5	Each student will write a reflective paper on a relevant topic using 1000-1500 words.
End-semester exam	10	A test of 20 full marks will be administered with following items: 10 Objective items - (weightage of each item will 0.5 marks; full marks = 5); 3 subjective items (creative type) (5 marks for each one; full marks = 15) The obtained score will be halved to covert to the full mark 10.
Total	25	
Practical (15 marks)		
Class observation (school), report writing on classroom management and instruction, and presentation	5	3 classes to be observed by a student Report: 3 marks Presentation: 2 marks
Lesson plan preparation in teaching various skills and aspects at school level	5	5 lesson plans, each one with 1 full mark
Constructing teaching materials for teaching various skills and aspects of language at school level	5	At least 10 different materials, full marks 0.5 per piece of work
Total	15	

Criteria	**Marks**	**Remarks**
External evaluation (60%)		
Theory (40 marks)		

External Examination	40	Group A: Objective items (10×1) = 10 Group B: Short answer type items (6× 5 marks) = 30 (Two questions will be added for choice; given in 'or')
Practical (20 marks)		
Class observation (school), report writing on classroom management and instruction, and presentation	10	3 classes to be observed by a student Report: 6 marks Presentation: 4 marks
Lesson plan preparation in teaching various skills and aspects at school level	5	5 lesson plans, each one with 1 full mark
Constructing teaching materials for teaching various skills and aspects of language at school level	5	At least 10 different materials, full marks 0.5 per piece of work
Total	20	

H. Ed.471: Teaching Health Education - I

Course Code: H. Ed.471	**Credit Hour**: 3.
Level: Postgraduate Diploma in Education (PGDE)	**Teaching Hour**: Th.32+Pr.32=64
Semester: First	**Nature of Course**:(2Th. + Pr.1)

1. Course Description

This course is designed to provide students with the pedagogical knowledge and skills of health education to enhance their teaching skill. The course is divided into two parts. Theoretical part of the course deals with providing students with professional knowledge on curriculum, teaching methods, learning resources, communication, and planning and evaluation in health education. The second part of the course is practical under which the students involve in practical activities of designing health education curriculum, prepare various learning resources, and apply innovative teaching methods for health education in classroom teaching.

2. General Objectives

- To orient students about foundations of health education and skill-based approach to health instruction.
- To provide students with professional knowledge of the organizational pattern, approaches and process of curriculum development in health education.
- To enable student to apply the knowledge of taxonomy of educational objectives in designing curriculum, lesson plan and evaluation in health education.
- To help students develop knowledge on various teaching methods and strategies and apply teaching strategies for effective health instruction.
- To equip students with knowledge and skills in instructional design, instructional planning and evaluation of health education teaching in schools.
- To enable students to critically analyze the school level health education curriculum and textbook.

3. Specific Objectives and Contents

Part I: - Theoretical Part **32 period (32 Hours)**

Unit I: Foundations of Teaching Health Education (6 hours)

Specific Objectives	**Course Contents**
• Describe concepts and roles of health education in school setting. • Analyze foundations of health education. • Discuss a skill-based approach to teaching health education. • Analyze components of coordinated school health/whole school approach in promoting health and skills of students. • Discuss and describe components of standards-based health education.	1. Concepts and roles of health education 2. Foundations of health education 2.1 Scientific foundations (Health and environmental sciences) 2.2 Psycho-behavioural foundations 2.3 Educational foundations 2.4 Socio-cultural foundations 3. Coordinated school health/whole school approach. 4. Areas of teaching standards-based health education 4.1 Core concepts 4.2 Analyzing influences 4.3 Accessing valid and reliable information, products and services 4.4 Interpersonal communication 4.5 Decision-making 4.6 Goal setting 4.7 Self-management 4.8 Advocacy
Activities	**Educational Implications**
Instructor introduces students about concept of health education and asks students about contents/topic of health education and teaching learning process. Students will be asked to categorize contents of	• Consider foundations of health education while designing and planning health education program. • Analyze components of a skill-based

health education. Then students will discuss foundations and pillars of health education. Instructor introduces different approaches of health education and focuses discussion on a skill approach to health education. Components of coordinated school health will be displayed on the board and there will discussion each component. Likewise, instructor will use different methods and strategies to facilitate students to learn about the basis of standards-based health education	approach while planning and implementing school-based health education program. • Apply the whole school approach while designing and implementing school-based health education program. • Consider the minimum standards of health education while teaching health education related contents.

Recommended Books and References

- Benes, S. & Alperin, H. (2022). *The essential of teaching health education: Curriculum, instruction, and assessment.* Champaign, USA: Human Kinetics.
- Telljohann, S.K., Symons, C. W., Pateman, B., & Seabert, D. (2016). *Health education: Elementary and middle school applications (Eighth Edition).* New York: McGrahill Education.

Unit II: Curriculum in Health Education (6 hours)

Specific Objectives	**Course Contents**
• Clarify concept and need of health education curriculum. • Identify factors that influence design and development of health education curriculum in Nepali context. • Analyze components of Hilda Tab's Model of curriculum development. • Discuss approaches of health education curriculum development using subject-centered design, broad field/integrated	2.1 Concept and need of health education curriculum. 2.2 Factors influencing health education curriculum design. 2.3 Review Hilda Taba's model of curriculum development. 2.4 Patterns/approaches of curriculum design: (Subject-centered design, broad field/integrated design, humanistic design, problem-centered design, learner-centered

design, humanistic design, problem-centered design, and learner-centered design. • Develop a showcase of health education curriculum following the steps of curriculum development. • Discuss on modern curriculum trend of Nepal.	design) 2.5 Steps in health education curriculum development: 1) Get to know students and community (needs analysis), 2) formulate goals, 3) determine health contents, information, and skills, 4) create a scope and sequence (organization of contents), 5) select learning experiences/opportunities (methods/strategies), 6) organize contents and learning opportunities by developing unit plan, and 7) evaluate unit plan (contents and learning opportunities)
Activities	**Educational Implications**
Presentation, Discussion and Question Answer: Students will be divided into different groups and asked to prepare notes related to meaning and importance of health education curriculum, organizational pattern, curriculum plan and factors to be considered while framing health education curriculum and modern trend of curriculum development in Nepal to each group. And each group will write a note for classroom discussion, followed by question answer at the end.	• Prospective teachers could reflect on considering various factors while designing health education curriculum. • Prospective teachers will utilize their insights while designing subject-centered, learner-centered health education curriculum as well designing broad-field or integrated health education curriculum. • Prepare a showcase of health education curriculum following the inherent steps of health education curriculum development.

Recommended Books and References

- Benes, S. & Alperin, H. (2022). *The essential of teaching health education: Curriculum, instruction, and assessment.* Champaign, USA: Human Kinetics.
- Telljohann, S.K., Symons, C. W., Pateman, B. & Seabert, D. (2016). *Health education: Elementary and middle school applications* (Eigth Edition). New York: McGrahill Education.

- CDC, (2078 *B.S.*). *माध्यमिक शिक्षा पाठ्यक्रम, कक्षा ९-१०./*

  http://*202.45.146.138*/elibrary/pages/search.php? search=%*21*collection*3791251*

- CDC, (2078 B.S.) *माध्यमिक शिक्षा पाठ्यक्रम कक्षा ११-१२.*

Unit III: Application of Educational Taxonomy in Health Education (5 hours)

Specific Objectives	**Course Contents**
• Describe the origin of taxonomy of educational objectives and revised Bloom's taxonomy. • Discuss elements/components of cognitive, affective, and psychomotor domains of learning. • Formulate instructional objectives considering lower to higher order thinking levels. • Explain ways of using educational taxonomy in curriculum design and lesson plan.	b. Introduction to Bloom's and revised Bloom's educational taxonomy c. Cognitive domain of learning d. Affective domain of learning e. Psychomotor domain of learning f. Use of educational taxonomy in curriculum design and lesson plan g. Formulating instructional objectives (lower to higher order thinking)
Activities	**Educational Implications**
Teacher/instructor introduces the concept of taxonomy of educational objectives and compare Bloom's and revised Bloom's educational taxonomy. Teacher will make presentation of cognitive, affective, and psychomotor domain of learning and discuss about use of educational taxonomy in curriculum design, unit plan and lesson plan. Teachers also provide a list of action verb that can be used in developing cognitive, affective, and psychomotor domain of learning. Then	Gain understanding about taxonomy of instructional objectives and empower them to analyze their teaching and student's learning outcomes. Develop a framework for cognitive behaviors which can be applied to understand the difficulty of tasks, conduct an assessment, and simplify or complicate the activities. Use their understanding of taxonomy of educational objective while formulating instructional/behavioural objectives and

students will be divided into several groups to formulate instructional objective reflecting lower to higher order thinking. Teacher will give assignment to students to make instructional objectives in cognitive, affective, and psychomotor domains of learning.	assessment from lower to higher order thinking. Understand and get insights to change the complexity of the questions and help students to achieve higher levels of thinking.

Recommended book and References

- Marzano, R.J. & Kendall, J.S. (2007). The new *taxonomy of educational objectives. London: Corwin Press, Sage Publications Ltd.*
- Bloom, B.S., et al. (1956). *Taxonomy of educational objectives. The classification of educational goals, handbook 1: The cognitive domain.* New York: Longmans Green.

Unit: -IV. Instructional Design and Planning in Health Education (8 hours)

Specific Objectives	Course Content
• Explain concept and needs of instructional designs in health education. • Explain and apply ADDIE model in designing and planning instruction for teaching health education. • Apply ASSURE model in planning instruction according to school curriculum. • Introduce instructional planning and explain its importance in health education. • Discuss concept, needs, importance, and components of annual/work plan, unit plan and daily lesson plan. •	4.1 Instructional designs 4.1 Concepts and needs of instructional design, 4.2 ADDIE (Assess, Design, Develop, Implement and Evaluate) model 4.3 Process/steps: ASSURE (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) 4.2 Instructional planning in health education. 4.2.1 Meaning and importance of instructional planning in health education. 4.2.2. Concept, needs, and components of work plan/annual and unit plan in health education. 4.2.3. Concept, importance, and characteristics of daily lesson plan 4.2.5. Component of daily lesson plan in health education. 4.2.6 Behavioral and constructivist models of lesson plan

Specific Instructional Techniques

Activities	**Educational Implications**
Teacher will provide reading materials regarding instructional design to students and students come with some ideas before coming to the class. Teacher will ask student to express their understanding about instructional design. The teacher will make a presentation on instructional design and there will be group discussion on process of instructional design for effective teaching and learning. Teacher will provide learning resources regarding instructional planning and evaluation to the prospective teachers ahead of the class and ask them to review the resources and present their critical understanding in the class. Other students will take part in class presentations on the given subject matter and critically assess the class presented by their peers. At last classes will be summarize with discussion.	• Prospective teachers can apply knowledge and skills gained from this unit regarding instructional design to plan and design effective health instruction while teaching health education in school. • Develop work plan and unit plan for effective implementation of health education program in school. • Prepare appropriate lesson plan according to nature and topic of health education considering educational taxonomy/domain of learning and constructivist/behavioural models of lesson plan.

Recommended Books and References

- Benes, S. & Alperin, H. (2016). *Lesson planning for skilled based health education.* America, Human Kinetics
- Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York: Springer.
- Brown, A., & Green, T. (2016). *The essentials of instructional design* (Third Edition). New York: Routledge Taylor and Francis Group
- Morrison, G.R., Ross, S.M., Morrison, J.R., & Kalman, H.K. (2016). *Designing effective instruction* (eight edition). Danver, MA: John Wiley & Sons, Inc.

- Gilbert, G.G., Sawyer, R.G. & McNeill, B.E. (2011). *Health education: Creative strategies for school and community health (3rd Edition).* Sudbury, M.A: Jones and Bartlett Publisher.
- Mangal, S.K & Mangal, U. (2013). *Essential educational technology*. New Delhi: PHI Learning Pvt. Ltd.
- Ramachandran, L. & Dharma Ingham, T. (2013). *Health education: A new approach*. New Delhi: Vikash Publishing House Pvt. Ltd.

Unit: -V. Methods and Strategies for Effective Health Instruction (7 hours)

Specific objectives	**Course Content**
• Conceptualize teaching as a profession and teachers as professionals. • Discuss teaching as transmission, teaching as a transactional and teaching as a transformation approaches. • Describe concept and needs of different teaching methods and strategies in health education classroom teaching. • Describe and apply teacher-centered, learner-centered, and activity/project focused methods and strategies in health education classroom teaching. • Identify elements and processes of creating positive learning environment in the school for	5.1 Teaching as profession 5.1.1 Meaning of teaching as profession and teachers as professionals 5.1.2 Teaching as a transmission (Information dissemination approach), Teaching as a transactional (Interaction approach) and Teaching as a transformation (Contextualized approach) 5.2 Teaching methods and strategies 5.2.1 Concept and need of teaching methods and strategies 5.2.2 Teacher-centered methods and strategies 5.2.3 Student-centered methods and strategies 5.2.4 Activity/project focused methods and strategies 5.3 Positive learning environment in health

effective health instruction. • Discuss elements and process of implementing skill-based approaches to school health education. • Explain components of skill-based approach to health education • Discuss and delineate skill-based approach in practice of school health education.	education classroom teaching 5.4 Skill-based approaches to teaching health 5.4.1 Concept of skill-based approach 5.4.2 Components of skill-based approach 5.4.3 Skill-based approach in practice

Specific Instructional Techniques

Activities	Educational Implications
• Brain Storming, Questions -answer and Discussion • In this unit, teachers explore student's understanding about teacher and teaching profession using brainstorming techniques. Then there will be discussion about teacher and teaching as transmission, teaching as transactions, and teaching as transformation. • Students will be divided into three groups: First group discuss about teacher-centered teaching strategies, second group will student-centered teaching strategies, and third group will discuss on activity/project focused methods, and each group will make presentation, followed by discussion. • Each student will be asked to present about instructional methods in health education. The teacher will evaluate the class presentation and	Understanding about teacher and teaching professional motivates prospective teachers to learn professional skills of teaching to be effective health education teachers. Prospective teachers can use a variety of teaching methods and strategies while teaching health education contents in the real world situation. Prospective teachers can use participatory and learner-centered strategies for skill-based approach to health instruction and creating effective learning environment.

provide feedback for further improvements. • Participatory discussion methods will be employed regarding the applicability and challenges of using various methods and strategies of health education.	

Recommended Books and References

- Agrawal, J.C. (1996). *Principles, methods, and techniques of teaching.* New Delhi: Vikas Publishing house Pvt, Ltd.
- Budhathoki, C. B. &Wagle, B. P. (2071). *Teaching health and physical education and school health.* Kathmandu: Pinnacle Publication.
- Gilbert, G.G., Sawyer, R.G. & McNeill, B.E. (2011). *Health education: Creative strategies for school and community health (3rd Edition).* Sudbury, M.A: Jones and Bartlett Publisher.
- Jha, A. K. (2062). *Methods of teaching health education.* Kathmandu: M.K. Publication.
- Kafle, B.M. (2005). *Teaching health and physical education and school health Programme.* Kathmandu: , Bhudi Puran Publication.
- Mangal, S.K & Mangal, U. (2013). *Essential educational technology.* New Delhi: PHI Learning Pvt. Ltd.
- Sampath, K., Panneerselvam, A. & Santhanam, A. (2000). *Introduction to educational technology (4th edit.)* New Delhi: Sterling Publishers Pvt. Ltd.
- Sherchan, L. & Upreti, Y.R. (2074). *Teaching health and physical education (Nepali).* Kathmandu: Quest Publication.
- Wagle, D., & Sedai, S. (2063). *Methods of teaching health and physical education (2nd ed.)* Kathmandu: Ozone Books.

Part Two: - Practical Part **32 hours**

Units	**Practical work for skill development**
Unit I: Foundations of Health Education and a Skill-Based Approach (5 hours)	• Write a report of group work. • Teacher will divide students into two or more groups and each group provide some components of standards-based teaching health to discuss how skills can be developed among students. Each group will read relevant literature and discuss among the

	members of the group. After discussion, each group will write a brief report and present it in the class.
Unit II: Curriculum in Health Education (5 hours)	• Conduct group discussion on the design and process of curriculum development. • Each student will review health and physical education curriculum of school level. • Develop a sample of health education curriculum for any one grade of basic school level. • Present a sample curriculum in the class and make documentation.
Unit III: Application of Educational Taxonomy in Health Education (5 hours)	• Selection the appropriate action verbs based on taxonomy of objectives. • Write instructional/behavioral objectives in cognitive domain of learning from lower to higher order thinking skills (Prepare at least 20 objectives), make class presentation and documentations. • Write behavior objectives in affective and psychomotor domain learning (15+15=20 objectives), make presentation and documentation.
Unit: IV. Instructional Design, Planning and Evaluation in Health Education (6 hours)	• Divide students into two or more groups and make group discussion about the process of instructional design. • Assign each student to prepare instructional design for teaching population education. • Preparation of work plan/annual plan and unit plan**.** • Developing a model daily lesson plan in health education. • Each student will teach at least two lessons to their peers in the class (on campus teaching).
Unit: -V. Methods and Strategies for	• Ask each student to select two teaching methods and

Effective Health Instruction (6 hours)	prepare how to use them in teaching health in basic school level. • Each student will demonstrate technique of using particular teaching in teaching and learning process. • Student will write a report about how to use various teaching methods and strategies for effective health instruction.

5. Recommended Books and References

- Agrawal, J.C. (1996). *Principles, methods, and techniques of teaching.* New Delhi: Vikas Publishing house Pvt, Ltd.
- Anspaugh, D.J. (1998). *Teaching today's health.* Boston: Allyn and Bacon.
- Benes, S. & Alperin, H. (2016) *Lesson planning for skilled based health education.* America, Human Kinetics.
- Benes, S. and & Alperin, H. (2022). *The essential of teaching health education: Curriculum, instruction and assessment.* Champaign, USA: Human Kinetics.
- Budhathoki, C. B. &Wagle, B. P. (2071). *Teaching health and physical education and school health.* Kathmandu: Pinnacle Publication.
- Cohen, L, Manion, L & Morrison, K. (2007). *A guide to teaching practice.* (First Indian reprint) Park Square: Routledge.
- Dhakal, S. N. & Shrestha. M. K. (2074). *Teaching health and physical education.* Kathmandu: Viddharthi Pustak Bhandar,
- Gilbert, G.G., Sawyer, R.G. & McNeill, B.E. (2011). *Health education: Creative strategies for school and community health (3rd Edition).* Sudbury, M.A: Jones and Bartlett Publisher.
- Jha, A. K. (2062). *Methods of teaching health education.* Kathmandu: M.K. Publication.
- Mangal, S.K & Mangal, U. (2013). *Essential educational technology*. New Delhi: PHI Learning Pvt. Ltd.
- Sampath, K., Panneerselvam, A. & Santhanam, A. (2000). *Introduction to educational technology (4th edit.)* New Delhi: Sterling Publishers Pvt. Ltd.
- Sherchan, L. & Upreti, Y.R. (2074). *Teaching health and physical education (Nepali).* Kathmandu: Quest Publication.
- Telljohann, S.K., Symons, C. W., Pateman, B. and & Seabert, D. (2016). *Health education: elementary and middle school applications (Eight Edition).* New York: McGrahill Education.

Evaluation Techniques (criteria)

Internal Evaluation 25: Theory

Internal evaluation will be conducted by the course teacher based on following activities.

1) Attendance	3 Marks
2) Participation in classroom learning activities	2 Marks
3) First assignment	5 Marks
4) Second assignment (Midterm exam) assessment	10 Marks
5) Third assignment/ assessment	5 Marks
Total	**25 Marks**

Internal Evaluation 15: Practical

Internal Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, subject teacher and expert nominated by campus/department chief.

1. Preparation of sample curriculum	5 Marks
2. Writing instructional/behavioural objectives in cognitive, affective and psychomotor domain	2.5
3. Preparation of instructional design, unit plan and model lesson plans	5 Marks
4. Participation and presentation (2+3)	2. 5 Marks
Total	**15 Marks**

External Evaluation 40: Theory

Examination Division, Office of the Dean, Faculty of Education will conduct the final examination at the end of the semester. The types and number of questions to be included in the final paper are as follows.

Objective type question (multiple choice 10 x 1 point)	10 Marks
Short answer question (6 questions x 5 points with 2 or questions)	30 Marks
Total	**40 Marks**

External Evaluation 20 (40% of 35): Practical

External Practical evaluation will be conducted in the campus/Department by the evaluation committee in the chair of head of the department, Subject teacher and expert nominated by campus/department chief.

1. Records of preparation of sample curriculum and	**5** Marks
2. Records of exercise on writing instructional/behavioral objectives in cognitive, affective and psychomotor domain	5
3. Records of preparation of instructional design, unit plan and model lesson plans	5 Marks
4. Viva (oral test)	5 Marks
Total	**20 Marks**

P.Ed. 471: Teaching Physical Education-I

Course No.: P.Ed. 471 **Nature of Course:** Theoretical + Practical

Level: Postgraduate Diploma in Education (PGDE) **Credit hours:** 3 (2th + 1pr.)

Semester: First **Total teaching hours:** 64 (32Th+32Pr)

3. Course Description

This course is designed for the first semester of postgraduate diploma in physical education. This is a major subject course entitled *Teaching Physical Education*. The purpose of this course is to teach prospective teachers a pedagogical knowledge and skills of teaching physical education. This course encourages prospective teachers to use proper skills in teaching concept of physical education, philosophies, fitness, athletics, and badminton. This course is theoretical and practical in nature.

4. General objectives

The general objectives of this course are as follows:

- Familiarize the concept of teaching of physical education and instructional process of teaching physical education and sports.
- Enhance comptencies of prospective teachers to teach physical education effectively using different teaching methods and strategies
- Enable the prospective teachers to effectively teach the major philosophies and foundations of physical education and sports.
- Develop skill to use appropriate teaching technique to teach physical fitness
- Enable to demonstrate the basic skills of athletics and badminton and using appropriate coaching strategies while teaching these games and sports.

4. Course Details

In order to achieve the expected outcomes of the course, the contents are organized as follows:

Unit I: Introduction to Teaching Physical Education (9)	
Specific objectives	contents
• Describe the concept of physical education • Elaborate teaching physical education as profession and teaching as goal-oriented activity • Describe instructional process in physical education and sports • Discuss ways for learning motor skills and stages of motor skills learning • Explore requirement for learning motor skills • Discuss appropriateness in skill development and learning, and transfer of learning • Discuss and describe ways for developing and maintaining a learning for physical education • Identify and apply appropriate methods for teaching physical education sports • Explore different types of instructional styles and employ effective teaching tactics in teaching game and sports	• Concept of physical education • Concept of teaching physical education: Teaching as profession and teaching as goal-oriented activity • Understanding instructional process • Learning motor skills and stages of motor skills learning • Requirement for learning motor skills • Appropriateness in skill development and learning, and transfer of learning • Developing and maintaining a learning environment for physical education • Concept of teaching methods and materials in teaching physical education and sports • Methods and strategies for teaching athletics and sports: peer teaching, team teaching, station teaching, cooperative learning, self-instructional and cognitive strategies • Exploring teaching/instructional styles and employing effective teaching tactics • Determining factors of teaching methods in physical education and sports
• **Activities**	• **Pedagogical implications**
• Facilitator will provide learning resources to the prospective teachers before the class starts, and ask them to discuss on the given topic and present their critical understanding in the class. • Facilitator will deliver the contents of	• Prospective teachers will apply understanding instructional process and stage of motor skill learning to facilitate students' learning of game and sports at school • Consider appropriateness in skill

teaching methods/materials and its importance by using Power Point, followed by question-answer and prospective teachers will be asked to prepare the educational plans. • Prospective teachers will take part in class presentation on the given subject matter and critically assess the class presented by their peers. • Facilitator will evaluate the class presentation and provide feedback for further improvements.	development and requirement for motor skills and transfer of learning while engaging teaching physical education • Prospective teachers will make their efforts for developing and maintain environment for teaching physical education in schools • Apply different teaching strategies and instructional styles while teaching physical activity, games and sports in schools • Apply the educational plans in their professional activities. • Select the appropriate teaching methods in teaching physical education and sports.

Resources

Rink, J.E. (204). *Teaching physical education for learning*. New York: McGrawhill

Shimon, J. M. (2011). *Introduction to teaching physical education: Principles and strategies*. Champaign, USA: Human Kinetics.

Mosston, M. & Ashoworth (2008). *Teaching physical education*. First Online Edition, 2008

Mitchell, S.A., & Walton-Fisette, J.L. (2022) *Essential of teaching physical education,* Second Edition. Champaign, USA: Human Kinetics

Budhathoki, C. B. &Wagle, B. P. (2071). *Teaching health and physical education and school health.* Kathmandu: Pinnacle Publication.

Sherchan, L. & Upreti, Y.R. (2074). *Teaching health and physical education (Nepali).* Kathmandu: Quest Publication.

Wagle, D., & Sedai, S. (2063). *Methods of teaching health and physical education (2nd ed.)* Kathmandu: Ozone Books.

Unit two: Designing curriculum, learning experiences and instructional planning (6)

Specific objectives	Contents
• Discuss principles and process of physical education curriculum development • Identify different models of physical education curriculum development for organizing contents and learning experiences • Analyze school physical education curriculum • Explain criteria for selecting learning experiences • Discuss the process of content development and planning for content development • Describe process of establishing goals and learning outcomes • Prepare work plan, unit plan and lesson plan • Write performance objectives for planning lesson for physical education	• Principles and process of physical education curriculum development • Curriculum models as organizing framework. • Review of physical education curriculum of basic school • Designing learning experiences: criteria for selecting learning experiences, designing movement task, process of content development and planning for content development • Establishing goals and learning outcomes • Planning for teaching physical education (Work plan, unit plan and lesson plan • Planning daily lesson plan: Beginning the lesson, developing the lesson and ending lesson, closure, format of lesson plan
• **Activities**	• **Pedagogical implications**
• Facilitator will provide learning resources to the prospective teachers before the class starts, and ask them to discuss on the given topic and present their critical	• Apply principles and different models of physical education curriculum development to develop school physical education curriculum, organizing consents and

understanding in the class. • Facilitator will deliver the contents of teaching methods/materials and its importance by using Power Point, followed by question-answer and prospective teachers will be asked to prepare the educational plans. • Prospective teachers will take part in class presentation on the given subject matter and critically assess the class presented by their peers. • Facilitator will evaluate the class presentation and provide feedback for further improvements.	learning opportunities • Prospective teachers can prepare certain criteria for selecting learning experiences and designing movement tasks • Prospective teacher can formulate learning goals and outcomes while planning and organizing physical education events • Apply the educational plans in their professional activities. • Prepare appropriate work plan and unit plans for promoting effective teaching and learning in schools • Prepare and use daily lesion when prospective teachers become school teachers.

Resources

Rink, J.E. (204). *Teaching physical education for learning*. New York: McGrawhill

Shimon, J. M. (2011). *Introduction to teaching physical education: Principles and strategies*. Champaign, USA: Human Kinetics.

Mosston, M. & Ashoworth (2008). *Teaching physical education*. First Online Edition, 2008

Mitchell, S.A., & Walton-Fisette, J.L. (2022) *Essential of teaching physical education, Second Edition.* Champaign, USA: Human Kinetics

Budhathoki, C. B. &Wagle, B. P. (2071). *Teaching health and physical education and school health.* Kathmandu: Pinnacle Publication.

Sherchan, L. & Upreti, Y.R. (2074). *Teaching health and physical education (Nepali).* Kathmandu: Quest Publication.

Wagle, D., & Sedai, S. (2063). *Methods of teaching health and physical education (2nd ed.)* Kathmandu: Ozone Books.

Walton-Fisette, J.L., & Wuest, D. (2015). *Foundations of physical education, exercise science and sports*. New York: McGrawHill Education

Unit III. Philosophies and foundations of physical education (5)	
Specific objectives	**Contents**
• Explore the major global and national policies and commitments made in physical education and sports. • Apply the understanding of philosophy in teaching physical education. • Analyze the implication of foundations of physical educations. • Critically examine theories of learning that can be applied in teaching physical education	2.8. Major policies and commitments on physical education and sports 2.9. Major philosophies (Pragmatism, modernism, post-modernism, humanism, post-humanism) in physical education and sports 2.10. Implication of (Historical (Ancient) biological, psychological and sociological foundations in physical education and sports 3. Theories of learning applied to physical education (Behaviorism, cognitivism, constructivism, and social learning)
Activities	**Pedagogical implications**
• Prospective teachers will search and study the learning resources about policies, commitments, philosophies and foundations of PE and sports in the library/Internet. • Facilitator will encourage prospective teachers to critically engage in the dialogue on teaching philosophies in PE and sports. • Prospective teachers will be given assignment and they will present their ideas and lesson learnt by using power points. • Facilitators and perspective teachers will collaboratly find the effective ways	• Apply the major policies and commitments made in national and international level about PE and sports in their professional activities (e.g. teaching and planning). • Critically examine and apply the fundamental values of philosophies in teaching physical education. • Employ the appropriate teaching strategies to teach the implication of foundations of physical education.

of teaching foundations of PE.	

Resources

- Nepal Law Commission (2078). Sports development acts-2079. Kathmandu: Nepal Law Commission., G. F. (1971). *Foundations of education*. John Wiley & Sons.
- Ozmon, H. A., & Craver, A. M. (1999). *Philosophical foundations of education*. Prentice-Hall.
- Leaman, O. (2011). *Eastern philosophy: Key readings.* Routledge.
- Wuest, D. A. & Bucher, C. A. (1992). *Foundations of physical education and sport.* New Delhi: B.I. Publications Pvt Ltd.
- Singh, A. Bains, J. Gill, J.S. Brar, R.S. (2012). *Essentials of physical education*. New Delhi: Kalyani Publishers.
- Walton-Fisette, J.L., & Wuest, D. (2015). *Foundations of physical education, exercise science and sports*. New York: McGrawHill Education

Unit IV. Teaching Fitness (4)

Specific objectives	Contents
• Analyze the nature and importance of fitness. • Apply the concept of physical fitness in teaching physical activities and sports • Apply the essence of motor fitness in teaching physical education and sports	3.6. Teaching physical fitness (Health related fitness, Skill related fitness) 3.7.Teaching motor fitness 3.8.Teaching modern trend in physical fitness 3.9. Teaching role of physical fitness in sports and health promotion
Activities	**Pedagogical implications**
• Facilitator will provide students with learning materials on physical fitness and ask perspective teachers present their findings in the class. • Facilitator will show a video related to components of physical fitness/motor	• Involve in physical activities and exercises for maintaining physical fitness/motor fitness. • Use the appropriate techniques for developing fitness. • Use the proper strategies in teaching fitness

fitness and perspective teachers will be discussing based on it. • Facilitator will demonstrate how to practice for enhancing the fitness and perspective teachers will follow the facilitators.	

Resources

- Davis, B., Bull, R., Roscoe, J. & Roscoe, D. (2000). *Physical education and the study of sport*. Spain: Mosby Harcourt Publishers Limited.
- Howell, R., Howell, M. & Uppal, A. K. (1994). *Foundations of physical education*. Delhi: Friends Publications.
- Wuest, D. A. & Bucher, C. A. (1992). *Foundations of physical education and sport***.** New Delhi: B.I. Publications Pvt Ltd.
- Sigh, Singh, A. Bains, J., Gill, J.S., Brar, R.S. (2012). *Essentials of physical education*. New Delhi: Kalyani Publishers.
- Roy, T. C., Springer, B. A., McNulty, V., & Butler, N. L. (2010). Physical fitness. *Military medicine*, *175*(suppl_8), 14-20.
- Walton-Fisette, J.L., & Wuest, D. (2015). *Foundations of physical education, exercise science and sports*. New York: McGrawHill Education
- NASPE (2011). *Physical education for lifelong fitness*. Champaign, USA: Human Kinetics

Unit V. Teaching Athletics (4)

Specific objectives	Contents
- Explain the meaning of athletics - Perform different skills of running, jumping and throwing events - Conduct different events of athletics meet	4.6. Implication of teaching methods and technology in athletics 4.7.Teaching running events 4.8.Teaching Jumping events 4.9.Teaching throwing events 4.10. Organizing Athletic meet
Activities	**Pedagogical implications**

- The facilitator will demonstrate all the skills required for athletics at the beginning of every class, the perspective teachers will observe and participate in the activities along with facilitators. - The perspective teachers will be given a project work of preparing a layout on the ground for athletics. - Perspective teachers will be assigned to organize an intramural competition in athletics in which they will play a role of an official in turns.	- Participate in athletics (running, jumping and throwing) events. - Organize the athletics meet in a well manner. - Apply the appropriate teaching techniques while teaching athletics.
Resources • I.A.A.F. (2006). ***Track and field:*** *A basic coaching manual*. London: Author. • I.A.A.F. (2008). Track and field: A basic facilities manual. London: Author. • LA84 Foundation (2016). Track and field coaching manual. New York: LA84 Foundation	
Unit V. Teaching Badminton (4)	
Specific objectives	**Contents**
- Perform basic skills of Badminton game - Demonstrate the coaching strategies of Badminton game. - Apply the teaching strategies of teaching rules and regulations of Badminton game. - Conduct Badminton tournament	5.1 Teaching basic skills of Badminton game 5.2 Teaching coaching strategies of Badminton skills and tournament 5.3 Teaching rules and regulations practice of Badminton 5.4 Organizing Badminton tournament
Activities	**Pedagogical implications**
- The facilitator will demonstrate the basic skills of Badminton at the beginning of every class, the	- Practice of the basic skills of volleyball/badminton in real teaching. - Use the appropriate coaching strategies to

perspective teachers will observe and participate in the activities along with facilitators. - The perspective teachers will be given a project work for watching videos regarding teaching strategies of volleyball/badminton games, and they will be asked to demonstrate the teaching strategies of badminton on the ground. - Perspective teachers will be assigned to organize an intramural competition in badminton in which they will play a role of an official in turns.	motivate practitioners to practice volleyball/badminton. - Apply the rules and regulations of Badminton while playing it. - Organize the badminton tournaments in a well manner
Resources • FIVB (2016). ***FIVB rules book*.** Switzerland: Author. • FIVB (2011). *Coaches' manual.* Switzerland: Author. • LA84 Foundation (2012). *Volleyball coaching manual*. New York: LA84 Foundation • LA84 Foundation (2016). *Badminton coaching manual*. New York: LA84 Foundation	

Recommended books

- Baruwal, H. B. (2065). *Historical development of physical education.* Kathmandu: Pinnacle Publication.
- Baruwal, H. B., Shrestha, S. B., Bhatta Datta, T. D., Shrestha, M. K. & Poudel, T. R. (2075). *Foundation of physical education.* Kathmandu: Pinnacle Publication.
- Maharjan, R. K. (2008). *Foundations of physical education*. Kirtipur: Sunlight Publication.
- Sherchan, L. (2012). *Foundations of physical education and sports.* Kathmandu: Quest Publication.

Part II: Practical Teaching Hrs.: 32

Unit IV. Teaching Fitness (8)	
Specific objectives	**Contents**
• Demonstrate different methods skill to teach different types of physical fitness • Demonstrate skills for teaching motor fitness • Apply the concept of physical fitness in teaching physical activities and sports • Apply the essence of motor fitness in teaching physical education and sports	3.10. Teaching different types of physical fitness exercise such aerobic (walking, dancing, jugging, running, pushing, aerobic exercise), flexibility (stretching and yoga exercise), and muscle strengthening (sit-ups, push-ups, weightlifting, digging) and students' practices of physical fitness activity 3.11. Teaching motor fitness (Agility, speed balance, coordination) and students' practices of motor fitness related activities.

Unit IV. Teaching Athletics (12)	
Specific objectives	**Contents**
- Explain the meaning of athletics - Demonstrate skills to perform different skills in running, jumping, and throwing events - Conduct different events of athletics meet -	4.11. Implication of teaching methods and technology in athletics 4.12. Teaching running events and students' running exercises. 4.13. Teaching Jumping events and students' jumping exercise. 4.14. Teaching throwing events and students throwing exercise. 4.15. Organizing Athletic meet

Activities	Pedagogical implications
- The facilitator will demonstrate all the skills required for athletics at the beginning of every class, the perspective teachers will observe and participate in the activities along with the facilitators. - The perspective teachers will be given a project work of preparing a layout on the ground for athletics. - Perspective teachers will be assigned to organize an intramural competition in athletics in which they will play the role of an official in turns.	- Participate in athletics (running, jumping, and throwing) events. - Organize the athletics meet in a good manner. - Apply the appropriate teaching techniques while teaching athletics.

Resources

I.A.A.F. (2006). ***Track and field:*** *A basic coaching manual*. London: Author.

I.A.A.F. (2008). Track and field: A basic facilities manual. London: Author.

LA84 Foundation (2016). Track and field coaching manual. New York: LA84 Foundation

Unit V. Teaching Badminton (12)

Specific objectives	Contents
- Perform basic skills in volleyball/Badminton game - Demonstrate the coaching strategies of Badminton game - Apply the teaching strategies of teaching rules and regulations of Badminton games - Conduct Badminton tournament	5.1 Teacher will show basic skills and explain rules of Badminton game 5.2 Teaching coaching strategies for Badminton skills and tournament 5.3 Students will play Badminton in Badminton court under instructions 5.4 Students will Organize Badminton tournament
Activities	Pedagogical implications
- The facilitator will demonstrate the basic skills of Badminton at the beginning of every	- Practice the basic skills of badminton in real teaching.

class, the perspective teachers will observe and participate in the activities along with the facilitators. - The perspective teachers will be given a project work for watching videos regarding teaching strategies of badminton games, and they will be asked to demonstrate the teaching strategies of badminton on the ground. - Perspective teachers will be assigned to organize an intramural competition in badminton in which they will play the role of an official in turns.	- Use the appropriate coaching strategies to motivate practitioners to practice badminton. - Apply the rules and regulations of Badminton while playing it. - Organize the badminton tournaments in a good manner

Resources

FIVB (2016). ***FIVB rules book*.** Switzerland: Author.

FIVB (2011). *Coaches' manual.* Switzerland: Author.

LA84 Foundation (2016). *Badminton coaching manual*. New York: LA84 Foundation

4. Evaluation

4.1 Evaluation for Theory (Internal Assessment and External Assessment)

Nature of course	Internal Assessment	Semester Examination	Total Marks
Theory	25 Marks	40 Marks	65 Marks

4.1.1 Internal Evaluation (Theory) 20 Marks

Internal evaluation will be conducted by the course facilitator based on following activities:

1.	Attendance and participation in learning activities	5 Marks
2.	First assignment (written assignment)	5 Marks
3.	Second assignment (report writing and presentation)	5 Marks
4.	Third assignment/Term exam	5 Marks
	Total	20 Marks

Note: *A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)*

First assignment/assessment might be quiz, home assignment etc. according to the nature of the course. The second assignment/assessment might be project work, case study, seminar, survey/field study and individual/group report writing (in about 1500 words), term paper based on secondary data or review of literature and documents (in about 1500 words) etc. and the third assignment will be term exam.

4.1.2 External Evaluation (Final Examination) 30 Marks

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester. The marks distribution will be

Objective type question (multiple choice 10 x 1 point)	10 Marks
Short answer question (6 questions x 5 points with 2 or questions)	30 Marks
Total	**40 Marks**

4.2 Evaluation for Practical (Internal and External Evaluation)

Nature of course	**Internal Evaluation**	**External Evaluation**	**Total Marks**
Practical	15 Marks	20 Marks	35 Marks

4.2.1 Internal Evaluation for practical 15 Marks

Internal Practical evaluation will be conducted by the course facilitator. Marks distribution for practical internal evaluation will be as following.

Internal Evaluation (Practical) 15 Marks

Internal evaluation will be conducted by the course facilitator based on following activities:

1. Participation practical activities and 80% attendance	5
2. Preparation of sample physical education curriculum and unit plan and lesson plans	5
3. Participation in physical fitness, althelitics and badminton	5
Total	15

4.2.2 External Evaluation **30 Marks**

External Practical evaluation will be conducted by the evaluation committee comprising of subject teacher and expert nominated by the Dean office/campus/department/controller office of the examination.

Marks distribution for practical external evaluation will be as following.

1.	Records of sample curriculum design and unit plan, lesson plans	5 Marks
2.	Demonstration of skills of physical fitness, altheltics and badminton (practical examination)	10 Marks
3.	Viva-voce	5 Marks
	Total	20 Marks

Note:

Perspective teachers must pass both in internal as well as external assessments of practical examination

A score (3, 4 or 5) be provided to perspective teachers based on the following criteria of attendance: 80-85%=3, 86-95%=4, 95% above=5)

** Practical teaching hours is 3 times more than teaching hours of theory (3x 16 = 48 hours)*

***A group consists of 15 perspective teachers and one teacher will be assigned for a group.*

ICT. Ed. 471: Teaching Information and Communication Technology (ICT)- I

Course No. ICT. Ed. 471 **Credit hours: 3**

Nature of the course: Theory +Practical **Teaching Hour 32 Th. + 32 Pr. = 64**

Level: Postgraduate Diploma in Education (PGDE)

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1. Course Description

This course is to impart knowledge introduces historical and philosophical development of ICT education and the use of ICT in education in different dimensions. It also aims to provide a theoretical knowledge about instructional design and technology for learning. It also gives opportunity understanding of curriculum and its materials of Basic and secondary level. This course emphasizes on teaching ICT including Computer Application and Hardware.

2. General Objectives of the Course

The general objectives of the course are as follows:

- To develop an understanding on different philosophy, learning theory policy and its intersection in ICT Education.
- To make the students able in classifying and preparing learning objectives of computer network of Bloom's taxonomy.
- To enable students, analyze critically the status of secondary and higher secondary curriculum in terms of scope and sequence of contents, objectives, and evaluation systems.
- To develop skills in analyzing different instructional strategies and to use them in the classroom instruction.
- Exposure on skills of ICT in designing teaching lessons in different subjects.
- Enhance competencies on planning learning strategies and prepare learning resources ICT professionals.

3. Contents

Objectives	Content
• Sketch the historical development timeline of IT, ICT and ICT Education • Discuss on the philosophy of ICT education in its intersection	**Unit 1 Philosophy, ICT Education and learning theory (9)** 1.1 Historical Timeline of IT, ICT and ICT Education 1.2 Philosophy of ICT Education • Constructivism,

• Explain the implications of different learning theories	• Connectivism, • Behaviorism, • Humanism and • Critical theory with intersection of philosophy 1.3 Cognitive theories of learning • Piaget's learning theory • Bruner's learning theory • Gagne's learning theory With implications of different learning theories
• Describe key points of Nepal School Sector Development Plan (SSDP) 2016-2023 • Analyze ICT Education Master Plan 2013 • To become familiar with national curriculum of computer sciences. (basic level to secondary level) • To give critical analysis of curriculum in terms of aims, scope and sequence horizontally and vertically. • Explain different models for curriculum design for ICT • Explain steps in development of ICT education curriculum for basic schools	**Unit 2 Education Plans and Curriculum Studies (9)** 2.1 National educational plan and policies 2.1.1 Nepal School Sector Development Plan (SSDP) 2016-2023 2.1.2 ICT Education Master Plan 2013 2.2 Secondary Education Curriculum 2.2.1 Basic Level Curriculum Grade 6-8 (2077) Science and Technology 2.2.2 Secondary Curriculum Grade 9-10 Computer Engineering (Technical and Vocational Stream 2.3 Critical analysis of curriculum in terms of aims, scope and sequence horizontally and vertically. 2.4 Model of curriculum design (subject-centered design, broad-field/integrated, learner-centered design) 2.5 Steps in development of ICT education curriculum for basic schools
• Prepare and present analytical write-up (Book review/long essay /seminar) related to the aspects of computer Science/ICT	**Unit 3 Textbook and Recourses for Secondary Education (6)** 3.1 Analysis of textbooks on Computer science of secondary level

education. • To identify and prepare learning resource for course of computer science. • Explore Learning tools and e-library, digital library, software and Resources sharing platform	• CDC Text Book • Different Publication Text book • Teacher Guide • E-Books 3.2 Digital library (pustakalaya.org, CDC Library, erdcn.org, unesdoc.unesco.org) 3.3 Resources Sharing Platform (Hour of Code, Nearpod, Schoology, Book Creator, Screencastify etc. 3.4 Learning tools (Smart Sparrow, Edmentum, Knewton) 3.5 Simulation (GNS3, NetSim, Omnet++, CPU-OS Simulator etc.)
• Write instructional/behavioural objectives according to Bloom`s taxonomy in cognitive, affective and psychomotor domains • Write instructional objectives considering lower to higher order thinking • Explain process and components of instructional design according to ASSURE model. • Describe the concept of digital pedagogy • Explain TPACK framework for digital pedagogy • Prepare work plan and unit plan for teaching ICT • Explain elements of lesson plans • To prepare lesson plan for specific topic choosing appropriate instructional strategies	**Unit 4 Instructional Design, Planning and Strategies** 4.1 Instructional Objectives: • General Objectives and • Specific objective • Classification based on Bloom`s taxonomy • Behavioural objectives from lower to higher order thinking 4.2 Instructional design: ASSURE model (Assess learners, State learning objectives, Select methods and materials, Utilize methods and media/materials, Require learners' participations, and Evaluate and revise) 4.3 Digital pedagogy and instructional design 4.3.1 Concept of digital pedagogy 4.3.2 Technological pedagogical contents knowledge (TPACK) framework for digital pedagogy 4.4 Instructional Planning for teaching ICT • Work Plan • Unit Plan • Lesson Plan 4.4 Instructional Strategies • Different teaching methods (Problem solving,

	Guided discovery, Project work (method), Inductive, Deductive, Laboratory, Experiment, Lecture) 4.5 Instructional strategies for digital pedagogy
• Prepare lessons plan on computer software, hardware and operating system and choose appropriate teaching strategies and materials for teaching ICT in schools • Demonstrate skills for teaching computer, software and operating system for school students	**Unit 5 Computer Application and Hardware Teaching (12)** 5.1 Select following topics of ICT and assign students to write instructional objectives, plan lessons and select appropriate strategies/methods and materials. 5.2 Demonstration and discussion of appropriate methods and strategies for teaching following topics • Computer Software and Operating System(Computer system and I/O devices, GUI based operating system, control panel, system tools and accessories , Introduce Linux, UNIX and Linux distribution, Mobile OS, OSS (Open Source Software)) • Computer Hardware (ALU & Control Unit, primary memory, Secondary memory types and characteristics of primary memory, Input Devices, Output unit, Microprocessor, • Emerging Technology(AI, Cloud Computing, IOT, Big data, Data mining/data warehouse, Virtual Reality (VR), Augmented Reality(AR) Repair and Maintenance (Fixing, Input & Output device connection issues., Power source and power protection, Backup and Recovery)

Part II Practical (32)

S. N.	Units	Practical Works
1	**Unit 2 Education Plans and Curriculum Studies (9)**	• Write a report of review of school level ICT education curriculum • Prepare a sample ICT/Computer Science curriculum for basic level
2	**Unit 3 Textbook and Recourses for Secondary Education**	• Identify CDC Book review templet/ guideline and review any one of basic or secondary education text book of computer science publish by CDC • To create blog post for identify Resources Sharing Platform and collecting for use in secondary classroom.
3	**Unit 4 Instructional Design, Planning and Strategies**	• Write instructional objectives from lower to higher order (6 objectives in each domain) in cognitive, affective and psychomotor domains of learning for teaching ICT in schools • Prepare work plan and Unit plans in any two units of secondary level ICT/Computer science curriculum • Develop at least 10 lesson plans for teaching ICT in schools, and teach at least two lessons for peers
4	**Unit 5 Computer Application and Hardware Teaching**	• Prepare lessons plans, choose appropriate teaching methods and identify different tools to teach software, hardware and operating system • Prepare instructional design using TPACK framework for digital pedagogy • Prepare a report focusing on digital pedagogy, TPACK framework and online teaching strategies

3. Instructional Techniques

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

4.1 General Techniques

- Providing the reading materials to the students to familiarize the units.
- Lecture, question-answer, discussion, brainstorming, practical, and buzz session.

4.2 Specific Instructional Techniques

Unit	Activity and Instructional Techniques	Teaching Hours (64)
1	Lecture, Group work, presentation	**9**
2	Review writing, project work , Lecture	**9**
3	Research work, Discussion, Report writing	**9**
4	Report writing and presentation, Discussion	**6**
5	Project work, Presentation, Discussion	**10**
6	Lecture, Group work, presentation	**10**
7	Review writing, project work , Lecture	**7**
	Total	

4. Evaluation (Internal Assessment and External Assessment):

Nature of course	Internal Assessment	External Practical Exam/ Viva	Semester Examination	Total marks
Theory +practical	**40%**	**20%**	**40**	**100%**

Note students must pass separately in internal assessment, external practical exam/viva and semester examination.

5.1 Evaluation for Part I (Theory)

5.1.1 Internal Evaluation 40%

Internal evaluation will be conducted by course teacher based on following activities:

1) Attendance 5 points

2) Participation in learning activities 5 points

3) First assessment (written assignment) 10 points

4) Second assessment (Term examination) 10 points

5) Third assessment (Internal Practical Exam/Case Study) 10 points

Total 40 points

5.1.2 External Evaluation (Final Examination) 40%

Examination Division, office of the Dean, Faculty of Education will conduct final examination at the end of semester.

1) Objective type question (Multiple choice 10questionsx1mark) 10 marks

2) Short answer questions (6 questions x 5 marks) 30 marks

Total 40marks

5.1.3 Evaluation for part II (practical) 20%

i) Records of practical activities……5

ii) Records of reports of book review and sample curriculum development……5

iii) Records of unit plans and lesson plans……5

iv) Laboratory work exam/Case……5

iii) VIVA……..……..5

Total …….. 40

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

Pol. Sc. Ed. 471 Teaching Political Science I

Semester: First

Code: Pol. Sc. Ed. 471 **Full Marks:** (65+35) =100

Level: Postgraduate Diploma in Education (PGDE) **Credit Hrs.:** 2 Th. +1 Pr. = 3

Nature of Course: Theoretical + Practical (2+1) **Teaching hours:** (32Th.+32Pr.) =64

1. Course Description

This course provides an overview of effective teaching strategies for political science courses. It covers best practices in curriculum and course designing, instructional planning, teaching thematic areas of political science, and teaching local politics. Students will learn how to design and teach engaging, inclusive, and effective political science courses. This course is designed to provide a theoretical base of pedagogical components and various skills of teaching strategies. To make the democratic system successful, it is necessary to develop political consciousness among the citizens. The main objective of this course is to prepare competent teachers to impart civic education, who will provide the basic knowledge of political science in the classroom and play an important role in preparing qualified citizens.

2. General Objectives

The general objectives of this course are as follows:

- To acquaint the students with the concept and nature of Political Science Education
- To familiarize the students with objectives in Political Science Education
- To prepare the students in designing the model curriculum in Political Science Education
- To provide the students with the techniques of book reviews
- To develop an understanding of basic thematic areas of Political Science**.**
- To enable the students for search local issues of Political Science and deliver them in the classroom of Political Science

3. Specific Objectives and Contents

Unit I: Introduction to Political Science Education (Teaching hours = 6)	
Specific Objectives	**Contents**
• Explain the concept, nature, and scope of Political Science • Differentiate between Political Science and Political Science Education • Describe traditional and modern approaches to Political Science • Explain the Relation of Political Science with other Social Sciences (History, Economics, Geography, Population,	1.1 Concept, nature, and scope of Political Science 1.2 Political Science and Political Science Education 1.3 Traditional and modern approaches to Political Science 1.4 Relations of Political Science with other disciplines (History, Economics, Geography, Population, Sociology, Anthropology, and Psychology)

Sociology, Anthropology, and Psychology) • Discuss the concept of politics of education	1.5 Politics of Education
Unit II: Teaching Thematic Areas of Political Science (Teaching hours = 7)	
Specific Objectives	**Contents**
• Explain political science as a discipline • Familiar with the teaching thematic areas of political science such as political theory and thought, comparative politics, international relations, teaching public administration, public policy, elections and electoral system	2.1 Political Science Education as a discipline 2.2 Political Theory and Thought 2.3 Comparative Politics 2.4 International Relations 2.5 Political Economy 2.6 Political Methodology 2.7 Political Behaviour
Unit III: Setting Instructional Objective in Teaching Political Science (Teaching hours = 12)	
Specific Objectives	**Contents**
• Analyze the educational objectives of Political Science • Clarify the concept of curricular objectives • Explain the features of instructional objectives • Instructional objectives by giving political science course • Demonstrate skills for writing instructional and behavioural objectives from lower to higher order thinking according to the revised Bloom's educational taxonomy	3.1 Concepts and Characteristics of Instructional objectives 3.2 Educational Objectives 3.3 Curricular Objectives 3.4 Instructional Objectives 3.5 Taxonomy of Instructional Objectives 3.6 Designing Instructional Objectives 3.7 Practical skills: 3.7.1 Writing instructional/behaviroual objectives in cognitive domain of learning from lower to higher order thinking (Prepare at least 20 objectives) class presentation and documentations. 3.7.2 Writing behaviour objectives in affective and psychomotor domain learning (15+15=30 objectives), presentation and documentation
Unit IV: Curriculum and Course Designing (Teaching hours = 10)	
Specific Objectives	**Contents**
• Explain the concept, elements, importance, and principles of the curriculum • Analyze the existing curriculum of Secondary level courses of political science in the context of Nepal	4.1 Concept, elements, importance, and principles of curriculum 4.2 Analytical study of the secondary level political science curriculum 4.3 Steps in developing curriculum for the secondary level

• Design a model curriculum of political science of higher secondary level in the context of Nepal • Explain the techniques of book reviews • Review any one book of political science or political science education	4.4 Techniques of book reviews 4.5. Practical skills: 4.5.1 Review book of political science or political science education (at least one) and documentation 4.5.2 Preparing a model curriculum for secondary level.
Unit V: Instructional Design and Planning (Teaching hours = 12)	
Specific Objectives	**Contents**
• Concept of instructional designs • Needs of instructional design in teaching and learning at school • Explain and apply ADDIE model in designing and planning instruction for teaching political science at schools • Explain Kemp, Morrison, and Ross's instructional design model. • Apply ASSURE model in planning instruction according to school curriculum, • Explain concept and importance of instructional planning in teaching and learning at school level • Construct and use of different types of instructional planning • Develop appropriate lesson plan for effective teaching according to school curriculum	5.1 Instructional designs 5.1.1 Concepts and needs of instructional design 5.1.2 Models: ADDIE (Assess, Design, Develop, Implement and Evaluate) 5.1.3 Process/steps: ASSURE (Assess learners, State learning objectives, select methods and materials, utilize methods and media/materials, require learners' participations, and evaluate and revise) 5.2 Instructional planning 5.2.1 Concepts and importance 5.2.2 Types of Instructional Planning 5.2.3 Work Plan 5.2.4 Unit Plan 5.2.5 Lesson Plan 5.2.6 Micro-teaching and peer teaching 5.3 Practical skills: a) preparation instructional design for teaching political science, b) preparation of annual and unit plan, c) exercise for writing behavioral objectives according to Bloom's taxonomy for lesson plan, and d) preparation model lessons (10 lesson plans), presentation, and documentation
Practical Work (Teaching hours = 17)	
Unit VI: Teaching Local politics	
Specific Objectives	**Contents**
• Explain the concept of local issues • Identify and selection of local issues - roles and functions of municipality, ward committee, local offices of federal and provincial government, pressure groups, civil societies, local political parties and	6.1 Concept of local politics 6.2 Selection of local political issues 6.3 Prepare plan for study of local political issue 6.3 Collection and analysis of data from local people

leaders • Describe teaching local issues in the Political Science classroom	6.4 Identifying needs and topics for teaching local political issue from data analysis 6.5 Preparation of report based on local political issues for classroom presentation 6.6 Presentation of the report in gathering of community people 6.7 Prepare at least four session/lessons for teaching local political issues to the local people

4. Modes of Instruction

Teachers can be used both general and specific modes of instructional strategies to deliver this curriculum in the classroom. They are as follows:

4.1 General instructional strategies

- Lecture
- Group discussion
- Guest lecture
- Question-answers
- Demonstration and Discussion
- Home assignment and self-study
- Classroom presentation
- Group work/Project work
- Reflective inquiry
- Problem-Solving

4.2 Specific Instructional Techniques

Unit	Activity and Instructional Techniques
I	Lecture, group discussion, report preparation for PowerPoint sharing and home assignment
II	Lecture, group discussion, google search, and classroom presentation
III	Self-study, group discussion, reflective inquiry, document study, guest lecture, report preparation for classroom presentation and prepare a review a book (practical)
IV	Lecture, group discussion, inquiry, classroom discussion, feedback, practical works.
V	Lecture, group discussion, issue/case selection, group work, presentation for feedback, and practical works
VI	Project work (observe roles and functions of various committees, authorities, and facilities of local school, collect data, preparation of field-based report in any one issue, presentation for feedback, and finalization of the report)

5. Evaluation

5.1 Internal Evaluation (40%)

Internal evaluation will be conducted by the course teacher based on the following activities:

Activities	Marks allotted (Th)
Attendance	3.5
Classroom activities	3.5
First assignment	6
Second assignment	6
Third assignment	6
Total	25

Activities	Marks allotted (Pr)
Attendance	5
Involvement in practical activities	5
Performance in practical activities	5
Total	15

5.2 External Evaluation (60%)

Final Examination (Th.) = (40)

Types of question	Total questions to be asked	Number of questions to be answered and marks allocated	Total marks
Group A: Multiple choice	10 questions	10 X 1 marks	10
Group B: Short answer	6 with 2 'or' questions	6 X 5 marks	30
Total			40

External Evaluation (Pr.) = (20)

Activities	Marks allotted (Pr. External)
Records of book review and development of sample curriculum	7
Records of sample instructional designs, unit plan and lesson plans	8
Viva-voce	5
Total	20

6. Recommended Books

कैयुम, अब्दुल (२०६९), *राजनीतीशास्त्र शिक्षण विधि,* बिद्यार्थी पुस्तक भण्डार ।

कैयूँम, अब्दुल र घिमिरे, बिलास (२०६९), *राजनीतिशास्त्र शिक्षण,* हाइल्याण्ड प्रकाशन प्रा.लि. ।

खनाल, पेशल (२०७९), *अनुसन्धानात्मक पद्धति,* सनलाइट पब्लिकेसन ।

ढकाल, माधवप्रसाद (२०६०), *शिक्षाको दर्शनशास्त्रीय एवम् समाजशास्त्रीय आधार,* बिद्यार्थी पुस्तक भण्डार।

ठाकुर, इन्द्रदेव (२०६५), *सामाजिक अध्ययन शिक्षण,* रत्न पुस्तक भण्डार ।

दाहाल, रामकुमार (२०५३), *राजनीतीशास्त्र शिक्षण विधि.* एम.के.पब्लिशर्स एण्ड डिष्ट्रिव्यूटर्स ।

फूएल, श्यामप्रसाद (२०७५), *राजनीतिशास्त्र शिक्षण विधि,* सनराइज पब्लिकेसन ।

लुइटेल, चक्रपाणी (२०६८), *सामाजिक अध्ययन शिक्षण,* निमा प्रकाशन ।

वाग्ले, मनप्रसाद र पौडेल, लेखनाथ (२०६१), *पाठ्यक्रम र मूल्यांकन,* बिद्यार्थी पुस्तक भण्डार ।

श्रेष्ठ, चन्द्रबहादुर र रंजितकार, किरणराम (२०५९), *पाठ्यक्रम र मूल्यांकन,* भुँडीपुराण प्रकाशन ।

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Bhatia, B. D. & Bhatia, K. (2001). *Principles and methods of teaching*. Doba House Book Sellers and Publisher.

Ishiyama, J. Miller, W.J. & Simon. E. (eds.) (2015). *Handbook on Teaching and Learning in Political Science and International Relations*. Edward Elgar Publishing Limited.

Kumar, K. L. (1996). *Educational technology*. New Age International Ltd.

Sharma, P. L. (2002). *Modern Methods of Teaching Political Science*. Sarup & Sons.

Sharma, R. A. (2003). *Essentials of measurement in education and psychology*. Surya Publication.

Sylor, J. G. & Alexander, W. M. (1974). *Curriculum for schools*. Holt Rimehart and Winston, Inc.

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पाठ्यांश संख्या : नेपा.शि. ४७१ क्रे.आ.: ३ (सैद्धान्तिक २ + प्रयोगात्मक: १)

पाठ्यांश प्रकृति : सैद्धान्तिक तथा प्रयोगात्मक प्रतिहप्ता पाठघन्टी : ३

तह : शिक्षामा अधिस्नातक जम्मा पाठघन्टी : ३२सै. +३२ प्र. =६४

सेमेस्टर : प्रथम

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१. पाठ्यांश परिचय

प्रस्तुत पाठ्यांश त्रिभुवन विश्वविद्यालय शिक्षाशास्त्र सङ्कायअन्तर्गत सेमेस्टर प्रणालीको प्रथम सत्रमा आधारित नेपाली शिक्षा विषयमा अधिस्नातक (पिजिडिई.) तहमा विशिष्टीकरण गर्न चाहने विद्यार्थीहरूका लागि तयार पारिएको हो । यस कार्यक्रममा नेपाली मूल विषय लिई स्नातक तह उत्तीर्ण गरेका विद्यार्थीहरू सहभागी हुन सक्ने छन् । यसमा भाषा पाठ्यक्रमको परिचय, भाषा पाठ्यक्रम निर्माणका सिद्धान्त तथा माध्यमिक तह र आधारभूत तहका नेपाली पाठ्यक्रमको विश्लेषण, भाषा पाठ्यपुस्तकका विशेषता, नेपाली भाषा पाठ्यपुस्तकको अध्ययन, अध्यापन योजना तथा शिक्षण सामग्री निर्माण र तिनको प्रयोगसम्बन्धी पाठ्यवस्तु समावेश गरिएका छन् । यसबाट सम्बद्ध विद्यार्थीले नेपाली भाषाको पाठ्यक्रमअनुरूप पाठ्यपुस्तक निर्माण गरी तदनुरूप शिक्षण योजना र सामग्री निर्माण एवम् तत्सबन्धी प्रयोगको ज्ञान र कौशल आर्जन गर्ने अपेक्षा राखिएको छ ।

२. साधारण उद्देश्य

यस पाठ्यांशको अध्ययनपछि विद्यार्थीहरू निम्नलिखित उद्देश्य हासिल गर्न सक्षम हुने छन् :

- भाषा पाठ्यक्रमका प्रकारगत विशेषता र तिनका ढाँचासँग परिचित हुँदै पाठ्यक्रम निर्माणको कौशल अभिवृद्धि गर्न,
- पाठ्यक्रम अनुरूपताका आधारमा विद्यालय तहका नेपाली भाषा पाठ्यक्रमको अध्ययन र मूल्याङ्कन प्रक्रियासँग परिचित हुन,
- आन्तरिक र बाह्य विशेषताका आधारमा आधारभूत तह वा माध्यमिक तहका नेपाली भाषा पाठ्यपुस्तकको अध्ययन गर्ने दक्षता आर्जन गर्न,

- अध्यापन योजनाका विविध प्रकारसँग परिचित भई नेपाली भाषा शिक्षणमा तिनको सन्दर्भअनुकूल उपयोग गर्ने सिप पहिल्याउन र
- नेपाली भाषा शिक्षणमा प्रयुक्त हुने शिक्षण सामग्रीको परिचय, प्रकार र ढाँचा पहिल्याई तिनको निर्माण र प्रयोग गर्ने कलामा अभ्यस्त हुन ।

३. विशिष्ट उद्देश्य र पाठ्यविषय

विशिष्ट उद्देश्य	पाठ्यविषय
▪ भाषा पाठ्यक्रमको परिचय दिई पाठ्यक्रम र पाठ्यांश बिचको भिन्नता छुट्याउन, ▪ प्रकारगत आधारमा भाषा पाठ्यक्रमका विशेषता केलाउन, ▪ भाषा पाठ्यक्रम निर्माणका सामान्य सिद्धान्तहरूको चर्चा गर्न, ▪ भाषा पाठ्यक्रमको ढाँचागत स्वरूप तयार पार्न, ▪ विद्यालय तहको नेपाली भाषा पाठ्यक्रमको ऐतिहासिक पृष्ठभूमि केलाउन, ▪ माध्यमिक तहका निर्धारित नेपाली भाषा पाठ्यक्रमहरूको अध्ययन गरी तिनका विशेषता औंल्याउन, ▪ आधारभूत तह (कक्षा ६, ७ र ८) को नेपाली भाषा पाठ्यक्रमको अध्ययन गरी तिनका विशेषता निर्धारण गर्न ।	**एकाइ एक : नेपाली भाषा पाठ्यक्रमको अध्ययन (१०+१० = २०)** १.१ भाषा पाठ्यक्रमको परिचय १.२ पाठ्यक्रम र पाठ्यांश १.३ भाषा पाठ्यक्रमका प्रकार १.३.१ पद्धतिनिष्ठता १.३.२ प्रबन्धनिष्ठता १.३.३ प्रयोजनपरकता १.४ भाषा पाठ्यक्रम निर्माणका सामान्य सिद्धान्तहरू १.५ भाषा पाठ्यक्रमको ढाँचा १.६ विद्यालय तहको नेपाली भाषा पाठ्यक्रमको ऐतिहासिक पृष्ठभूमि १.७ माध्यमिक तहका नेपाली भाषा पाठ्यक्रम (वि.सं. २०२८, २०५५, २०६४ र २०७८) को अध्ययन १.८ आधारभूत तहको नेपाली भाषा पाठ्यक्रम (२०७७) को अध्ययन

▪ भाषा पाठ्यपुस्तकको परिचय दिन, ▪ भाषा पाठ्यक्रम र पाठ्यपुस्तकको अन्तर्सम्बन्ध ठम्याउन, ▪ भाषा र अन्य विषयका पाठ्यपुस्तकको भिन्नता छुट्याउन, ● भाषा पाठ्यपुस्तकका आन्तरिक र बाह्य विशेषता औंल्याउन, ● परम्परागत र आधुनिक भाषा पाठ्यपुस्तकको अन्तर छुट्याउन, ▪ भाषा पाठ्यपुस्तक निर्माणका आधारको चर्चा गर्न, ▪ नेपाली भाषा पाठ्यपुस्तकको ऐतिहासिक पृष्ठभूमि बताउन, ● आन्तरिक र बाह्य विशेषताका आधारमा माध्यमिक तहका निर्धारित नेपाली भाषा पाठ्यपुस्तकको अध्ययन गर्न, ● आधारभूत तहअन्तर्गत कक्षा ६, ७ र ८ का वर्तमान नेपाली भाषा पाठ्यपुस्तकको अध्ययन गरी तिनका विशेषता औंल्याउन ।	**एकाई दुई : नेपाली भाषा पाठ्यपुस्तकको अध्ययन (१०+१० = २०)** २.१ भाषा पाठ्यपुस्तकको परिचय २.२ भाषा पाठ्यक्रम र भाषा पाठ्यपुस्तकको अन्तर्सम्बन्ध २.३ भाषा पाठ्यपुस्तक र अन्य पाठ्यपुस्तक २.४ भाषा पाठ्यपुस्तकका आन्तरिक र बाह्य विशेषता २.६ परम्परागत र आधुनिक भाषा पाठ्यपुस्तक २.७ भाषा पाठ्यपुस्तक निर्माणका आधारहरू २.८ नेपाली भाषा पाठ्यपुस्तकको ऐतिहासिक पृष्ठभूमि २.९ माध्यमिक तहका नेपाली भाषा पाठ्यपुस्तकहरूको (वि.सं. २०२८, २०५५, २०६४ र २०७८)को अध्ययन २.१० आधारभूत तह (६, ७ र ८) का वर्तमान नेपाली भाषा पाठ्यपुस्तकको अध्ययन
● अध्यापन योजनाको परिचय दिई त्यसको प्रयोजन बताउन, ● वार्षिक योजना, कार्ययोजना र एकाइ योजनाको परिचयसहित ती योजना	**एकाइ तिन : अध्यापन योजना निर्माण (७+७ = १४)** ३.१ अध्यापन योजनाको परिचय र प्रयोजन ३.२ वार्षिक योजनाको परिचय र निर्माण

निर्माण गरी कार्यान्वन गर्न, ● विविध विधा र भाषातत्वमा आधारित भई दैनिक पाठयोजना र लघु पाठयोजना निर्माण गरी तदनुकूल शिक्षण गर्न ।	३.३ कार्ययोजनाको परिचय र निर्माण ३.४ एकाइ योजनाको परिचय र निर्माण ३.५ पाठयोजनाको परिचय, निर्माण र प्रयोग ३.५.१ दैनिक पाठयोजनाको परिचय ३.५.२ दैनिक पाठयोजना निर्माण र प्रयोग ३.५.३ लघु पाठयोजनाको परिचय ३.५.४ लघु पाठयोजना निर्माण र प्रयोग
● शिक्षण सामग्रीको परिचय दिई नेपाली भाषा शिक्षणमा यसको आवश्यकता औंल्याउन, ● शिक्षण सामग्रीको परिचयसहित नेपाली भाषा शिक्षणका लागि सामग्री (श्रव्य, दृश्य, श्रव्यदृश्य, स्पर्श, पाठ्य, मौखिक, स्थानीय) को सङ्कलन, निर्माण र पाठ्यवस्तु अनुकूल प्रयोग प्रक्रिया निर्धारण गर्न, ● नेपाली शिक्षणमा उपयोग गर्न सकिने नवीनतम शिक्षण प्रविधि (कम्प्युटर, मोबाइल, टिम्स, जुम र गुगल मिट) को परिचय दिन ।	**एकाइ चार : शिक्षण सामग्री निर्माण र प्रयोग** **(५+५ = १०)** ४.१ शिक्षण सामग्रीको परिचय ४.२ नेपाली भाषा शिक्षणमा शिक्षण सामग्रीको आवश्यकता ४.३ नेपाली भाषा शिक्षणमा प्रयोग गर्न सकिने शिक्षण सामग्रीका प्रकार ४.३.१ श्रव्य सामग्रीको परिचय, सङ्कलन , निर्माण र प्रयोग ४.३.२ दृश्य सामग्रीको परिचय, सङ्कलन, निर्माण र प्रयोग ४.३.३ श्रव्यदृश्य सामग्रीको परिचय, सङ्कलन, निर्माण र प्रयोग ४.३.४ मौखिक सामग्रीको परिचय, सङ्कलन , निर्माण र प्रयोग

	४.३.५ स्पर्श सामग्रीको परिचय, सङ्कलन, निर्माण र प्रयोग ४.३.६ पाठ्य सामग्रीको परिचय, सङ्कलन, निर्माण र प्रयोग ४.३.७ स्थानीय सामग्रीको परिचय, सङ्कलन, निर्माण र प्रयोग ४.४नेपाली शिक्षणमा उपयोग गर्न सकिने नवीन शिक्षण प्रविधिको परिचय र प्रयोग ४.४.१ कम्प्युटर र मोबाइल प्रविधिको परिचय र प्रयोग ४.४.२ टिम्स ,जुम र गुगल मिटको प्रयोग

प्रायोगिक खण्ड (३२)

४ .१ प्रायोगिक क्रियाकलाप र शिक्षण प्रविधि

प्रायोगिक क्रियाकलाप र शिक्षण प्रविधिलाई दुई समूहमा विभाजन गरिने छ :

१. साधारण शिक्षण प्रविधि २. विशिष्ट शिक्षण प्रविधि

४.१ साधारण शिक्षण प्रविधि

यस पाठ्यांशका प्रत्येक एकाइमा आवश्यकताअनुसार शिक्षकद्वारा सम्बन्धित विषयवस्तुको प्रस्तुति, व्याख्यान, छलफल, प्रश्नोत्तर गराई विद्यार्थीलाई तत्सम्बन्धी अभ्यास गर्न लगाइने छ ।

४.२ विशिष्ट शिक्षण प्रविधि

यसको प्रयोग प्रायोगिक कार्यका रूपमा गरिने छ ।

क्र. सं.	एकाइ	प्रायोगिक कार्य
१	**एकाइ एक :** **नेपाली भाषा**	• एकल कार्यका रूपमा भाषा पाठ्यक्रमको ढाँचाअनुरूप कुनै विधाको नमुना पाठ्यक्रम निर्माण र कक्षाप्रस्तुति

	पाठ्यक्रमको अध्ययन (१०)	• युगल कार्यका रूपमा भाषा पाठ्यक्रमको ढाँचाअनुरूप कुनै कक्षाको नमुना पाठ्यक्रम निर्माण र प्रतिनिधिमूलक प्रस्तुति, • नेपाली भाषा पाठ्यक्रम .(वि.सं. २०२८ पूर्व) का गतिविधि समेट्ने गरी समूहगत गोष्ठीपत्र निर्माण र कक्षाप्रस्तुति, • समूह कार्यका रूपमा माध्यमिक तहको नेपाली भाषा पाठ्यक्रम (वि.सं.२०२८ र २०७८) मा समाविष्ट विधाको क्षेत्र र पाठ्यवस्तुको तुलनात्मक अध्ययन, प्रस्तुति र अन्तर्क्रिया, • परियोजना कार्यका रूपमा आधारभूत तहको कुनै कक्षा (६, ७ र ८) का नेपाली पाठ्यक्रमको समूहगत अध्ययन र प्रस्तुति
२	**एकाइ दुई : नेपाली भाषा पाठ्यपुस्तकको अध्ययन (१०)**	• वैयक्तिक कार्यका रूपमा भाषा पाठ्यपुस्तक निर्माणको ढाँचाअनुरूप निश्चित कक्षाका लागि कुनै विधाको नमुना पाठनिर्माण, प्रस्तुति र टिप्पणी, • ससाना समूहमा भाषा पाठ्यपुस्तक निर्माणको ढाँचाअनुरूप फरकफरक कक्षाका लागि नमुना पाठ्यपुस्तक निर्माण, प्रस्तुति र छलफल, • समूह कार्यका रूपमा आधारभूत तह (कक्षा ६, ७ र ८) को कुनै कक्षाको वर्तमान नेपाली पाठ्यपुस्तकको समीक्षा र नमुना प्रस्तुति, • भाषा पाठ्यपुस्तकका आन्तरिक विशेषताका शीर्षकलाई समूहगत रूपमा छुट्याई माध्यमिक तह (कक्षा ९ र १०) का वर्तमान नेपाली पाठ्यपुस्तकमा आधारित अध्ययनपत्रको नमुना निर्माण र प्रस्तुति ।
४	**एकाइ तीन : अध्यापन योजना निर्माण (७)**	• समूहगत छलफल गरी अध्यापन योजना र वार्षिक क्यालेन्डरको रूपरेखा निर्माण, • कार्ययोजना र एकाइ योजना निर्माणको ढाँचा र प्रयोगसन्दर्भमा ससानो समूहमा छलफल, • वैयक्तिक रूपमा कार्ययोजना र एकाइ योजनाको नमुना निर्माण र कक्षा प्रस्तुति, • विविध विधा र भाषातत्त्वमा आधारित दैनिक पाठयोजना र लघु पाठयोजनाका ढाँचा निर्माण, • निर्मित पाठयोजनाबारे सहपाठी साथीबिच अन्तर्क्रिया र सुझाव आदान प्रदान,

		• लघु पाठयोजनाअनुरूप नमुना शिक्षणको अभ्यास ।
३	**एकाइ चारः** **शिक्षण सामग्री निर्माण र प्रयोग** **(५)**	• विधाको प्रकृति र भाषातत्त्वअनुरूप शिक्षण सामग्री (श्रव्य, दृश्य, श्रव्यदृश्य, स्पर्श, पाठ्य, मौखिक, स्थानीय) को सङ्कलन र निर्माणको व्यक्तिगत अभ्यास, • सङ्कलित र निर्मित शिक्षण सामग्रीको पाठ्यवस्तु अनकूल प्रतिनिधिमूलक प्रयोग प्रस्तुति र पारस्परिक सुझाव, • *भाषा शिक्षणका सम्भाव्य नवीन शिक्षण प्रविधि* शीर्षकमा समूहगत गोष्ठीपत्र लेखन, प्रस्तुति र छलफल ।

४ .१ प्रायोगिक क्रियाकलाप र शिक्षण प्रविधि

प्रायोगिक क्रियाकलाप र शिक्षण प्रविधिलाई दुई समूहमा विभाजन गरिने छ :

१. साधारण शिक्षण प्रविधि २. विशिष्ट शिक्षण प्रविधि

४.१ साधारण शिक्षण प्रविधि

यस पाठ्यांशका प्रत्येक एकाइमा आवश्यकताअनुसार शिक्षकद्वारा सम्बन्धित विषयवस्तुको प्रस्तुति, व्याख्यान, छलफल, प्रश्नोत्तर गराई विद्यार्थीलाई तत्सम्बन्धी अभ्यास गर्न लगाइने छ।

४.२ विशिष्ट शिक्षण प्रविधि

एकाइ	क्रियाकलाप
एक	• पद्धतिनिष्ठ, प्रबन्धनिष्ठ र प्रयोजनपरक पाठ्यक्रमबिच तुलना गरी प्राप्त निष्कर्ष प्रतिनिधि विद्यार्थीलाई कक्षामा प्रस्तुत गर्न लगाउने, • विद्यार्थीलाई परियोजना कार्यका रूपमा भाषा पाठ्यक्रमको ढाँचा अनुरूप कुनै विधा वा कक्षाको नमुना पाठ्यक्रम निर्माण गरी कक्षामा प्रस्तुत गर्न लगाउने, त्यसपछि सहभागीक बिचमा परस्पर छलफल गराई पृष्ठपोषण

	प्रदान गर्ने, ● वि.सं. २०२८ पूर्वका नेपाली भाषा पाठ्यक्रमका गतिविधि समेटेर तयार पारिएको नमुना प्रतिवेदन कक्षामा प्रस्तुत गर्न लगाई समूहगत छलफल गराउने र अन्त्यमा सबलीकरणका लागि सुझाव दिने, ● माध्यमिक तहका नेपाली भाषा पाठ्यक्रम (वि.सं.२०२८ र २०७८) मा समावेश गरिएका विधाको क्षेत्र र पाठ्यवस्तुका विशेषताको तुलना गरी त्यसको निष्कर्ष कक्षामा प्रस्तुत गर्न निर्देशन दिने र केही विद्यार्थीको नमुना प्रस्तुतिपछि पृष्ठपोषण प्रदान गर्ने । ● कक्षाका समग्र विद्यार्थीलाई तीन समूहमा बाँडी प्रत्येक समूहलाई आधारभूत तह (वि.सं.२०७७) अन्तर्गत कुनै कक्षाको नेपाली पाठ्यक्रमको उपलब्धि केलाई कक्षामा प्रस्तुत गर्न लगाउने ।
दुई	● २.१ देखि २.६ सम्मको पाठ्यांश ्गृहकार्यका रूपमा दिई केही विद्यार्थीको कक्षाप्रस्तुतिलाई आधार बनाई हौसला बढाउन अभिप्रेरणा प्रदान गर्ने, ● भाषा पाठ्यपुस्तक निर्माणका आधारमा निश्चित तह वा कक्षाका लागि नमुना पाठ बनाई समूहगत रूपमा सेमिनार गर्न निर्देशन दिने र आवश्यकता अनुसार पुनर्बल प्रदान गर्ने, ● माध्यमिक तह (वि. सं. २०२८ र २०६४) का नेपाली भाषा पाठ्यपुस्तकका आन्तरिक विशेषताका शीर्षकलाई समूहगत रूपमा छुट्याई तुलनात्मक अध्ययन गर्न लगाउने र कक्षाप्रस्तुतिपछि सबलीकरणका लागि सुझाव दिने, ● आधारभूत तह वा माध्यमिक तहका वर्तमान नेपाली भाषा पाठ्यपुस्तकका खासखास पक्षमा केन्द्रित भई अध्ययनपत्र लेख्न लगाउने र पृष्ठपोषणका लागि सामूहिक सुझाव दिने ।
तीन	● अध्यापन योजनाबारे समूहगत छलफल गरी वार्षिक क्यालेन्डरको रूपरेखा तयार गर्न निर्देशन दिने,

	• कार्ययोजना र एकाइ योजना निर्माणको ढाँचा र प्रयोगबारे विद्यार्थीबिच समूहगत रूपमा पर्याप्त छलफल गर्न लगाउने, • प्रत्येक विद्यार्थीलाई कार्ययोजना र एकाइ योजनाका नमुना बनाउन लगाई कक्षामा प्रस्तुत गर्न लगाउने र अन्त्यमा पुनर्बल प्रदान गर्ने, • प्रत्येक विद्यार्थीलाई विविध विधा र भाषातत्वसँग सम्बद्ध दैनिक पाठयोजना र लघु पाठयोजनाका नमुना बनाउन निर्देशन दिने, • निर्मित पाठयोजनामध्ये केही पाठयोजना कक्षामा प्रस्तुत गर्न लगाई सहपाठीबिच पर्याप्त छलफल गराउने र अन्त्यमा सुधारात्मक सुझाव दिने, • विद्यार्थीलाई लघु पाठयोजनाको ढाँचाअनरूप नमुना शिक्षणको अभ्यास गराउने र सहपाठी साथीहरूलाई पनि कक्षा मूल्याङ्कनका लागि अभिप्रेरित गर्ने ।
चार	• शिक्षण सामग्रीको आवश्यकता र औचित्यका बारेमा छलफल गरी समूहगत निष्कर्ष कक्षामा प्रस्तुत गर्न लगाउने, • विधाको प्रकृति र भाषातत्वअनुरूप शिक्षण सामग्री (श्रव्य, दृश्य, श्रव्यदृश्य, मौखिक र स्पर्श) को सङ्कलन, निर्माण र सन्दर्भानुकूल प्रयोग गर्न बनाइएको समूहगत ढाँचा कक्षामा प्रस्तुत गर्न लगाउने र फरक समूहलाई टिप्पणी गर्न निर्देशन दिने, • नेपाली साहित्यका विविध विधा र भाषातत्वको शिक्षणमा उपयोग गर्न सकिने नवीन शिक्षण प्रविधिको सम्भावनाबारे खोजी गरी समूहगत प्रतिवेदन बनाई कक्षामा प्रस्तुत गर्न लगाउने र अन्त्यमा पृष्ठपोषण प्रदान गर्ने ।

५. मूल्याङ्कन प्रक्रिया

यस पाठ्यांशको मूल्याङ्कन यसप्रकार हुने छ :

४.१ आन्तरिक मूल्याङ्कन : २५+ १५ = ४० अङ्क

क) नियमित आन्तरिक मूल्याङ्कन

१) उपस्थिति ३ अङ्क

२) सहभागिता २ अङ्क

३) पहिलो आन्तरिक मूल्याङ्कन ५ अङ्क

४) दोस्रो आन्तरिक मूल्याङ्कन १० अङ्क

५) तेस्रो आन्तरिक मूल्याङ्कन ५ अङ्क

ख) प्रयोगात्मक आन्तरिक मूल्याङ्कन

१) भाषा पाठ्यक्रमको अध्ययन ५ अङ्क

२) भाषा पाठ्यपुस्तकको अध्ययन ५ अङ्क आधारभूत

३) अध्ययनपत्र लेखन तथा प्रस्तुति ५ अङ्क

- प्रयोगात्मक कार्यको आन्तरिक मूल्याङ्कनका लागि निर्धारित पाठ्यांशबाट प्रत्येक विद्यार्थीका लागि छुट्टाछुट्टै शीर्षक दिनुपर्ने हुन्छ ।
- विद्यार्थी सङ्ख्या बढी भएमा निम्न माध्यमिक तहका नेपाली पाठ्यक्रम र पाठ्यपुस्तक पनि उपयोगमा ल्याउन सकिने छ । यस्ता पाठ्यक्रम र पाठ्यपुस्तकबाट सैद्धान्तिक प्रकृतिका प्रश्न सोधिने छैन ।
- प्रयोगात्मक आन्तरिक मूल्याङ्कनका लागि विभागीय प्रमुख वा क्याम्पस प्रमुखद्वारा मूल्याङ्कन समिति गठन गरिने छ । उक्त समितिमा विषय शिक्षक, विषय विशेषज्ञ र विभागीय प्रमुख रहने छन् ।)

४.२ बाह्य मूल्याङ्कन ४०+ २० = ६० अङ्क

क) सैद्धान्तिक ४० अङ्क

१) बहुवैकल्पिक प्रश्न १० वटा , १०×१ = १० अङ्क

२) सङ्क्षिप्त उत्तरात्मक प्रश्न ६ वटा (दुईवटा प्रश्नमा अथवा) ६×५ = ३० अङ्क

सत्रान्तमा लिइने सैद्धान्तिक परीक्षा त्रिवि, शिक्षाशास्त्र सङ्काय, डिनको कार्यालयले सञ्चालन गर्ने छ ।

ख) प्रयोगात्मक २० अङ्क

प्रयोगात्मक कार्यको बाह्य मूल्याङ्कन निम्नानुसार हुने छ :

१) पुस्तक समीक्षा (व्यक्तिगत) ५ अङ्क

२) कार्यमूलक अनुसन्धान (व्यक्तिगत) ५ अङ्क

३) नेपाली भाषाशिक्षणका समस्यामा आधारित गोष्ठी सञ्चालन (सामूहिक) ५ अङ्क

४) जर्नलमा प्रकाशित लेखको समीक्षा (व्यक्तिगत) ५ अङ्क

- प्रयोगात्मक कार्यको बाह्य मूल्याङ्कनका लागि पनि विभागीय प्रमुख अथवा क्याम्पस प्रमुखद्वारा मूल्याङ्कन समिति गठन गरिने छ । उक्त समितिमा विषय शिक्षक, विषय विशेषज्ञ र विभागीय प्रमुख रहने छन् ।

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