

SEMESTER - III

INDIAN EDUCATION SYSTEM	
Course Code: BELD301	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Education During the Ancient, Medieval, and British Period

- Characteristics of education of Vedic and Buddhist era with special reference to aims, curriculum, methods, teacher – taught relations, discipline, and educational institutions
- Characteristics of education of Islamic era with special reference to aims, curriculum, methods, teacher – taught relations, educational institutions, and discipline
- Major recommendations of Macaulay's Minute-1835, Wood's Dispatch-1854, Hunter Commission-1882, Sadler Commission 1917, Hartog Committee 1929, and Sargent Plan-1944
- Gokhale's Bill and Wardha Scheme of Education
- National Education Movement- 1920-22

Unit II: Main Commissions / Programmes on Education in Independent India

- Recommendations on elementary education of the following:
 - Education Commission-1964-66
 - National Policy on Education- 1968, 1986 & Revised NPE – 1992
 - DPEP (1994)
 - SSA (2000)
 - RTE Act 2009.
 - NCF-2005 and Draft NCFSE-2023
 - National Knowledge Commission Report 2007
 - National Education Policy- 2020 and New Structure of Education

Unit III: Foundational and Preparatory Stage Education

- Importance and objectives of ECCE in NEP 2020
- Foundational Literacy and Numeracy
- Curriculum and Pedagogy in Foundational Stage
- Government schemes and policies related to early childhood education
- Transition from Foundational to Preparatory Stage
- Differentiated learning approaches in preparatory education
- Pedagogical Approaches in Preparatory Stage

Unit IV: Middle Stage Education

- Integrating subjects to promote holistic learning
- Role of teachers in facilitating multidisciplinary learning experiences
- Curriculum Framework for Middle Stage
- Critical thinking, creativity, and problem-solving
- Digital learning and ICT integration
- Comprehensive and competency-based evaluation

Suggested Reading:

1. Agrawal, J. C., & Agrawal, S. P. (1992). Role of UNESCO in education. Delhi:

Vikas Publishing House.

2. Agarwal, P. (2020). A Half Century of Indian Higher Education: Essays by Philip G Altbach. New Delhi: Sage Publications.
3. Chowdhry, N. K. (2009). Indian constitution and education. Delhi: Shipra Publications.
4. De, A., Khera, R., Samson, M., & Shiva Kumar, A. K. (2011). PROBE revisited: A report on elementary education in India. New Delhi: Oxford University Press.
5. Dewey, J. (2004). Democracy and education. Courier Dover Publications.
6. Government of India. (1966). Report of the education commission: Education and national development. New Delhi: Ministry of Education.
7. Government of India. (1986). National policy of education. Government of India.
8. Kaul, V. (2019). Early Childhood Education in India: A Historical and Contemporary Perspective. Springer.
9. Kochhar, S. K. (1993). Pivotal issues in Indian education. Sterling Publishers Pvt. Ltd.
10. Ministry of Human Resource Development. (2012). National policy on information and communication technology (ICT) in school education. MHRD, Government of India.
11. Mishra, S. (2022). Digital Learning and the Future of Education in India. New Delhi: Atlantic Publishers.
12. Mukherji, S. M. (1996). History of education in India. Baroda: Acharya Book Depot.
13. National Council of Educational Research and Training. (2005). National curriculum framework.
14. National Council of Educational Research and Training. (2006d). Position paper- National focus group on teaching of Indian language (NCF 2005).
15. Raina, V. (2010). FAQs on the right to free and compulsory education act 2009. Bharat Gyan Vigyan Samiti, UNICEF.
16. Rajput, J. S. (2002). Educational Reforms in India for the 21st Century. Sterling Publishers.
17. Sharma, R. C., & Bhardwaj, A. (2021). Teacher Education in the Context of NEP 2020: Emerging Challenges and Innovations. New Delhi: Shipra Publications.

HUMAN VALUES AND ETHICS	
Course Code: BELD302	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Introduction to Human Values

- Definition and Importance of Human Values
- Classification of Values:
 - Personal
 - Social
 - Professional
- Role of Values in Personal Development
- Moral and Ethical Values: Concepts and Distinctions
- Influence of Culture and Religion on Human Values

Unit II: Ethical Theories and Moral Development

- Overview of Major Ethical Theories:
 - Utilitarianism
 - Deontology
 - Virtue Ethics
- Theories of Moral Development:
 - Piaget
 - Kohlberg
 - Gilligan
- Ethics in Education: Teacher-Student Relationships and Classroom Environment
- Case Studies in Ethical Decision-Making

Unit III: Human Values in Education and Indian Constitution

- Role of Education in Value Development
- Value-Based Education: Approaches and Methods
- Curriculum Design for Value Education
- Strategies for Teaching Values in the Classroom
- Impact of Teacher Values on Student Learning
- Indian Constitution and its Preamble
- Values enshrined in the Indian Constitution

Unit IV: Human Values in Action

- Values in Personal Development: Integrity, Honesty, Empathy
- Values in Social Development: Equality, Justice, Compassion
- Values in Professional Development: Accountability, Respect, Fairness
- Strategies for Integrating Values in Education

Suggested Reading:

1. Austin, G. (1999). *The Indian Constitution: Cornerstone of a Nation*. Oxford: Oxford University Press.
2. Basu, D. D. (2013). *Introduction to the Constitution of India* (21st ed.). Gurgaon: LexisNexis.
3. Beauchamp, T. L., & Childress, J. F. (2013). *Principles of Biomedical Ethics* (7th ed.). Oxford University Press.
4. Chakraborty, S. K. (1999). *Values and Ethics for Organizations: Theory and Practice*. Oxford University Press.
5. Halstead, J. M., & Taylor, M. J. (2000). *Values in Education and Education in Values*. Routledge.
6. Frankena, W. K. (1973). *Ethics* (2nd ed.). Prentice-Hall.
7. Kidder, R. M. (2009). *How Good People Make Tough Choices: Resolving the Dilemmas of Ethical Living* (Revised ed.). New York: Harper.
8. Kumar, A. (2015). *Teaching Values in Schools: A Resource Book*. SAGE Publications.
9. Kumar, K. (2007). *Education and Society in Post-Independence India: Looking at Changing Contexts and Paradigms*. Orient Blackswan.
10. Kohlberg, L. (1984). *Essays on Moral Development, Volume 2: The Psychology of Moral Development*. Harper & Row.
11. Noddings, N. (2013). *Caring: A Relational Approach to Ethics and Moral Education* (2nd ed.). Berkeley: University of California Press.
12. Radhakrishnan, S. (2010). *Indian Philosophy: Volume I & II*. Oxford University Press.
13. Rokeach, M. (1973). *The Nature of Human Values*. Free Press.
14. Sharma, R. N. (2007). *Indian Ethics: Classical Traditions and Contemporary Challenges*. Munshiram Manoharlal Publishers.
15. Tiwari, K. (1998). *Classical Indian Ethical Thought: A Philosophical Study of Hindu, Jaina, and Buddhist Morals*. Motilal Banarsidass Publishers.

TECHNOLOGY AND EDUCATION	
Course Code: BELD303	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Concept of Educational Technology and Communication

- Meaning, Scope and Significance of Educational Technology
- Types of Educational Technology
- Technology in Education and Technology of Education
- Hardware Approach and Software Approach
- Communication: Concept and Process

Unit II: Integration of Technology in Teaching and Learning

- Multimedia and Interactive Tools: Use of multimedia in education, interactive whiteboards, and digital storytelling
- Learning Management Systems (LMS): Features, benefits, and examples of LMS (e.g., Moodle, Google Classroom).
- Educational Software and Apps: Types of educational software and their applications
- Emerging Technologies: Virtual reality, augmented reality, and artificial intelligence in education
- Pedagogical Approaches: Blended learning, flipped classroom, and personalized learning
- Digital Literacy: Developing digital literacy skills among teachers and students

Unit III: Designing Instructional System

- Formulation of instructional objectives
- Meaning of Instructional Design
- Principles of instructional design and technology integration.
- Models of Development of Instructional Design (ADDIE, ASSURE, Dick and Carey Model)
- Gagne's Nine Events of Instruction and Five E's of Constructivism
- Nine Elements of Constructivist Instructional Design
- Application of Computers in Education: CAI, CAL, CBT, CML
- Process of preparing Open and Distance Learning Material (ODLM)

Unit IV: E-Learning

- Concept of e-learning
- Approaches to e-learning (Offline, Online, Synchronous, Asynchronous)
- Emerging Trends in e learning: Social learning (concept, use of web 2.0 tools for learning, social networking sites, blogs, chats, video conferencing, discussion forum)
- Open Education Resources (Creative Common, Massive Open Online Courses)
- Application of Assistive technology in E learning

Suggested Reading:

1. Aggarwal, J. C. (2014). Essentials of educational technology. Vikas Publishing House Pvt. Ltd.
2. Agarwal, J. P. (2010). Modern educational technology. Black Prints Publications.
3. Semenov, A. (2005). Information and communication technologies in schools: A handbook for teachers. UNESCO.
4. Balasubramanian, K., & Clarke-Okah, W. (Eds.). (2006). ICTs for higher education: Background paper Commonwealth of Learning. Commonwealth of Learning.
5. Conrad, K. (2001). Instructional design for web-based training. HRD Press.
6. Das, R. C. (1993). Educational technology: A basic text. Sterling Publishers.
7. Evaut, M. (Ed.). (n.d.). The international encyclopedia of educational technology.
8. Graeme, K. (1969). Blackboard to computers: A guide to educational aids. Ward Lock.
9. Belson, S. I. (2003). Technology for exceptional learners. Houghton Mifflin.
10. Haas, K. B., & Packer, H. Q. (1990). Preparation and use of audio-visual aids (3rd ed.). Prentice Hall, Inc.
11. Kulkarni, S. S. (1986). Introduction to educational technology. Oxford-IBH Publishing Co.
12. Mangal, S. K., & Mangal, U. (2019). Essentials of educational technology. PHI Learning Pvt. Ltd.
13. Mishra, S., & Sharma, R. C. (2005). Interactive multimedia in education and training. Idea Group Publishing.
14. Mayer, R. E. (2001). Multimedia learning. Cambridge University Press.
15. Naidu, S. (2006). E-learning: A guidebook of principles, procedures and practices. Commonwealth Educational Media Center for Asia.
16. National Council of Educational Research and Training. (2005). Position paper on educational technology by national focus group. NCERT.
17. Reddy, Y. M. (2016). Educational technology: Integrating technology into teaching-learning process. Neelkamal Publications.
18. Sallis, E., & Jones, G. (2002). Knowledge management in education. Kogan Page Ltd.
19. Sampath, K., Panneerselvam, A., & Santhanam, S. (1981). Introduction to educational technology. Sterling Publishers Pvt. Ltd.
20. Sharma, R. A. (2001). Technological foundations of education. R. Lal Book Depot.
21. Sharma, K. D., & Sharma, D. V. (1993). Open learning system in India. Allied Publishers Ltd.
22. Singh, L. C. (Ed.). (2012). Educational technology for teaching and learning. Dhanpat Rai Publishing Company.
23. Venkataiah, N. (1996). Educational technology. APH Publishing Corporation.
24. Written, W. A., & Schuller, C. F. (n.d.). Instructional technology: Its nature and use of A.V. materials (5th ed.). Harper and Row Publishers.

SCHOOL PLANNING AND MANAGEMENT	
Course Code: BELD304	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: School Management

- Meaning and concept of School Management
- Meaning and concept of School Administration and Organization
- Difference among school management, administration and organization
- Administration of school education at different levels – Local, District, State and National
- Centralization / Decentralization and Role of Apex bodies in Educational Planning and management in school planning.

Unit II: Management of Material Resources

- Physical resources- physical space (Building), office, library, laboratory, playground and staffroom
- Seating arrangement, furniture, proper classroom management, display area, chalkboard, other facilities such as OHP and multimedia in classroom
- School climate (conducive, learner friendly, inclusive and vibrant)
- School Records – importance, types and maintenance (e) Concept of balanced diet and organization of mid-day meal services in schools.

Unit III: Management of Human Resources

- Headmaster- qualities, role and responsibilities
- Teacher- qualities, role and responsibilities
- Accountability of teachers
- Teacher evaluation
- Classification and promotion of students.

Unit IV: Functional aspect of School Management

- Discipline- concept, importance and techniques of discipline, punishment and its legal implications
- Time-table – importance, types and principles of construction
- Supervision – concept, types importance and techniques
- Co-curricular activities – concept, importance, types and organization
- School guidance services – concept, importance and organization.

Suggested Reading:

1. Bhatnagar, R. P., & Agrawal, V. (2003). Educational Administration: Planning and Supervision. R. Lall Book Depot.
2. Collahan, D. (1981). Ethics, teaching and education. Planeau Publishing Corporation.
3. French, W., Hull, J. D., & Dodds, B. L. (1956). American high school administration: Policy and practice.
4. Kochhar, S. K. (2011). School Administration and Management. Sterling Publishers Pvt. Ltd.
5. Miyan, M. (2004). Professionalization of teacher education. Mittal Publication.
6. Mohanty, J. (2005). Educational Administration, Supervision and School Management. Deep & Deep Publications.
7. Mukherjee, S. N. (2007). *Educational Administration and Management*. Acharya Book Depot.
8. Newsom, D., Langhout, & others. Administrative practices in large high schools.
9. Peters, M. (1966). Ethics in education. Allen and Unwin.
10. Sharma, R. C. (1983). School management. Savita Prakashan.
11. Sharma, S. N. (2000). School Management: Principles, Practices and Approaches. Kanishka Publishers.
12. Sharma, T. R. (2010). School Management and Administration. Alpha Publications.

MATHEMATICS I	
Course Code: BELD323	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Set Theory

- Sets
- Operations on sets
- Distributive laws
- De Morgan's law
- Power set
- Cartesian product.

Unit II: Mappings

- Injective
- Bijective
- Surjective mappings
- Inverse of a mapping
- Composite of mappings.

Unit III: Vector Algebra

- Vector & scalar Definition
- Properties of vector and scalar
- Operation of vector
- Modulus
- Grad
- Curl.

Unit IV: Logic and Circuits

- Statements
- Negation
- Conjunction
- Disjunction
- Implications
- Converse
- Contrapositive
- Necessary and sufficient condition
- Type of proofs
- Mathematical induction and deduction
- Truth tables
- Switching circuits
- AND, OR & NOT gates.

Suggested Reading:

1. Anton, H., & Rorres, C. (2013). Elementary Linear Algebra (11th ed.). Wiley.
2. Bhattacharya, P. B., Jain, S. K., & Nagpaul, S. R. (2007). First Course in Linear Algebra. New Age International Publishers.
3. Das, M. C. (2009). Vector Calculus. Narosa Publishing House.
4. Gupta, S. L., & Kumar, V. (2012). Vector Calculus. Pragati Prakashan.
5. Kapoor, V. K. (2006). Operations Research: Problems and Solutions. Sultan Chand & Sons.
6. Narayan, S. (2004). A Textbook of Vector Algebra. S. Chand & Company Ltd.
7. Sharma, J. K. (2010). Vector Calculus. Krishna Prakashan Media.
8. Sharma, J. N. (2005). Discrete Mathematics. Krishna Prakashan Media.
9. Singh, G., & Sharma, A. (2012). Digital Electronics: Principles and Integrated Circuits. S. K. Kataria & Sons.
10. Vasishta, A. R., & Vasishta, R. K. (2016). Modern Algebra. Krishna Prakashan Media.

POLITICAL SCIENCE I	
Course Code: BELD329	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Concept of Political Science

- Meaning and Definition of Political Science
- Nature and Scope of Political Science
- Political Science and Political Philosophy
- Is Political Science a Science?

Unit II: Meaning, Elements and Theories of State

- Meaning and Definition of State
- Elements of the State
- Distinction between:
 - State and Government
 - State and Society
 - State and other Associations
- The Social Contract Theory: Concept of General Will.
- The Historical or Evolutionary Theory: Divine Origin
- Force Theory, Patriarchal and Matriarchal Theory.

Unit III: Liberty and Equality

- Meaning, Definition and Nature of Liberty
- Kinds of Liberty
- Meaning, Definition and Nature of Equality
- Relation between Liberty and Equality

Unit IV: Rights and Duties

- Meaning and Nature of Rights
- Classifications of Rights
- Theories of Rights: Natural, Legal and Marxist Theory of Right
- Meaning of Duties
- Types of Duties
- Relations between Rights and Duties

Suggested Reading:

1. Appadmai. A (2000): The Substance of Politics: Oxford University Press, New Delhi.
2. Barker. Earnest. (1952): Principles of social and Political Theory: American Political Science association
3. Bhattacharya, D. C. (2010): Political Theory: Vijaya Publishing Calcutta
4. Bhattacharya, M & Ray, A (2013): Political Theory Ideas & Institutions: The World Press Private Limited
5. Gauba. O.P (2009): An introduction to Political Theory: Mac Millan Publisher India LTD New Delhi.
6. George. H. Sabine. (1973): History of Political Theory: Wadsworth Publishing Co Inc.
7. Johri. J. C. (1987): Contemporary Political Theory: Sterling Publisher Private Limited New Delhi,
8. Kapur. A. C. (1950): Principal of Political Science: S Chand & Company PVT LTD New Delhi.
9. Rathore. L. S. & Haqqi S. A. H. (1990): Political Theory and Organization: Political Science Association.

EDUCATIONAL EXCURSION	
Course Code: BELD351	Credit: 02 (L-0, T-0, P-2)
Contact Hours: 30	MM: 50 (Int.: 15 + Ext.: 35)

The practical course on educational excursion aims to provide students with hands-on experience in planning, organizing, and evaluating educational trips. These excursions are designed to enhance experiential learning, promote interdisciplinary understanding, and develop organizational and observational skills.

Course Outline

- **Planning and Preparation**

- Importance and objectives of educational excursions in curriculum.
- Identifying suitable destinations (historical sites, museums, nature parks, etc.).
- Developing itineraries and schedules.
- Arranging logistics (transportation, accommodation, meals).
- Risk assessment and safety measures.
- Obtaining permissions and preparing necessary documentation.

Activities:

- Group discussions on potential excursion destinations.
- Group wise preparation of a detailed excursion plan and itinerary.
- Creating a checklist for logistics and safety measures.

- **Implementation and Conducting the Excursion**

- Roles and responsibilities of organizers and participants.
- Effective communication and coordination during the excursion.
- Engaging students through interactive activities and observations.
- Managing unforeseen situations and ensuring safety.

Activities:

- Role-playing scenarios to handle emergencies and unexpected situations.
- Leading students on actual educational trips.

- **Observation and Data Collection**

- Recording and documenting observations (field notes, photography, video recording).
- Collecting feedback from participants and stakeholders.
- Analyzing and interpreting collected data.

Activities:

- Writing and presenting a detailed excursion report.
- Peer review and group discussions on the outcomes of different excursions.
- Reflective essays on personal experiences and learnings.

- **Planning and Conducting a Virtual Excursion**

- Selecting suitable virtual museums and observatories
- Preparing students for the virtual excursion
- Conducting the virtual excursion
- Post-excursion activities: Discussions, reflections, and assessments

Evaluation Methods:

- **Preparation and Planning (20%):** Assessment based on the quality and comprehensiveness of the excursion plan and itinerary.
- **Implementation (30%):** Evaluation of the actual conduct of the excursion, including leadership, coordination, and handling of situations.
- **Observation and Data Collection (20%):** Assessment of the thoroughness and accuracy of observations and data collected during the excursion.
- **Reporting and Reflection (30%):** Evaluation based on the final excursion report / presentations / reflective essays / Viva – voce.

Course Essentials:

The course will have three components:

1. Participation in all activities of Educational Excursion (as mentioned in the course outline)
2. Report writing for Educational Excursion with participation details.
3. Participation in Viva voce at the End of Semester.

Note: For successful completion of the course, all three components are compulsory.

SEMESTER - IV

ELEMENTARY EDUCATION	
Course Code: BELD401	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Introduction to Elementary Education

- Concept, aims, and objectives of elementary education
- Historical perspective of elementary education in India
- Constitutional provisions and legal framework
- Role of elementary education in national development

Unit II: Policies and Programmes in Elementary Education

- Major policies and their impact: NPE 1986, SSA, RTE Act 2009, NEP 2020
- Role of government and non-government organizations
- Inclusive education and its importance in elementary education
- Mid-day meal scheme and its impact

Unit III: Curriculum and Pedagogy in Elementary Education

- Principles of curriculum development for elementary education
- Child-centered pedagogy
- Activity-based learning and joyful learning
- Integration of Art, Physical Education, and Work Education
- Assessment and evaluation in elementary education

Unit IV: Current Trends and Challenges in Elementary Education

- Implementation of NEP 2020 in elementary education
- Teacher competencies and professional ethics
- Digital learning and use of technology in elementary education
- Challenges in Rural and Urban elementary education

Suggested Reading:

1. Aggarwal, J. C. (2004). Essentials of educational technology: Innovations in teaching-learning. New Delhi: Vikas Publishing House.
2. Aggarwal, J. C. (2010). Landmarks in the history of modern Indian education (7th ed.). New Delhi: Vikas Publishing House.
3. Bhattacharya, S. (2002). Education in India: Past, present and future. New Delhi: Orient Longman.
4. Jain, M. (2004). India's struggle for universal elementary education. New Delhi: Oxford University Press.
5. Jha, P., & Parvati, P. (2014). Right to Education Act 2009: Critical gaps and challenges. New Delhi: Social Science Press.
6. Kumar, K. (2010). A pedagogue's romance: Reflections on schooling. New Delhi: Oxford University Press.
7. Ministry of Education. (2020). National education policy 2020. Government of India.
8. NCERT. (2005). National curriculum framework 2005. New Delhi: NCERT.
9. NCERT. (2015). Continuous and comprehensive evaluation: Teacher's handbook for primary stage. New Delhi: NCERT.
10. Rao, V. K. (2007). Quality education. New Delhi: APH Publishing Corporation.
11. Sharma, P. (2016). ICT in education. New Delhi: APH Publishing Corporation.
12. Sharma, R. C. (2000). Modern science teaching. New Delhi: Dhanpat Rai Publishing.
13. Sinha, S. (2008). Pedagogy of primary school science. New Delhi: Sage Publications.
14. Srivastava, M. (2012). Challenges in elementary education. New Delhi: Atlantic Publishers.

EDUCATION FOR SUSTAINABLE DEVELOPMENT	
Course Code: BELD402	Credit: 02 (L-2, T-0, P-0)
Contact Hours: 30	MM: 50 (Int.: 15 + Ext.: 35)

Course Outline

Unit I: Introduction to Sustainable Development

- Concept and Principles of Sustainable Development: Definitions, history, and evolution of the concept
- Global Challenges and Sustainable Development Goals (SDGs): Overview of the 17 SDGs and their significance
- Sustainability and the Environment: Understanding environmental sustainability, natural resource management, and biodiversity conservation
- Case Studies: Examples of sustainable development initiatives from around the world

Unit II: Education for Sustainable Development (ESD)

- Role of Education in Sustainable Development: Importance of ESD in achieving the SDGs
- Curriculum and Pedagogy for ESD: Integrating sustainability into the curriculum, interdisciplinary approaches, and experiential learning
- Teaching and Learning Methods: Innovative and participatory teaching methods for ESD
- Assessment and Evaluation: Methods to assess learning outcomes related to ESD

Unit III: Practical Implementation of ESD

- Developing ESD Projects: Planning and implementing school-based and community projects
- Community Engagement and Participation: Strategies to involve community members in sustainable development initiatives
- Policy and Advocacy for ESD: Understanding policies supporting ESD and advocating for sustainability in education
- Challenges and Opportunities: Addressing barriers to implementing ESD and exploring opportunities for improvement

Suggested Reading:

1. Filho, W. L., & Pace, P. (Eds.). (2019). Teaching education for sustainable development at university level. Springer.
2. Mehta, S. R. (2010). Education for sustainability. New Delhi: Rajat Publications.
3. Sengupta, R. (2001). Ecology and economics: An approach to sustainable development. Oxford University Press.
4. Sharma, R.A. (2017). Environmental studies and ethics. Meerut: R.Lall Book Depot.
5. Sterling, S., & Huckle, J. (Eds.). (2014). Education for sustainability. Earthscan.
6. Tilbury, D. (2011). Education for sustainable development: An expert review of processes and learning. Paris: UNESCO.
7. UNESCO. (2014). Shaping the future we want: UN Decade of education for sustainable development (2005-2014) final report. Paris: UNESCO.
8. United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. UN General Assembly.

HEALTH EDUCATION AND YOGA	
Course Code: BELD403	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Concept and Importance of Health Education

- Health Education: Definition, Objectives and Scope
- Dimensions of Health: Physical health, Mental health, Social health, Emotional health
- Determinants of Health: Biological factors, Environmental factors, Socio-economic factors, Behavioral factors
- Health and Hygiene: Personal hygiene, School hygiene and sanitation
- Role of school and teachers in promoting health education in schools
- Role of community and parents in health education

Unit II: Physical Fitness and Nutrition

- Components of physical fitness: strength, endurance, flexibility, and coordination
- Importance of physical fitness
- Basic nutrients and their functions
- Balanced diet; Malnutrition and its effects
- Nutritional requirements for different age groups
- Implementing physical fitness programs in schools
- Promoting healthy eating habits among students

Unit III: Mental Health and Stress Management

- Definition, importance, and strategies for promoting mental health
- Common mental health issues in children and adolescents
- Causes and effects of stress
- Techniques for stress management: relaxation, meditation, and mindfulness
- Role of teachers in identifying and addressing mental health issues among students
- National health policies and school health programs

Unit IV: Introduction to Yoga

- Philosophy and History of Yoga
- Major schools of Yoga
- Types of Yoga: Hatha Yoga, Ashtanga Yoga, Kundalini Yoga, other forms of Yoga
- Basic asanas and benefits for beginners
- Importance of pranayama
- Basic pranayama techniques

Suggested Reading:

1. Bucher, C. A., & Wuest, D. A. (2016). Foundation of Physical Education, Exercise Science, and Sport. McGraw-Hill Education.
2. Greenberg, J. S. (2017). Comprehensive Stress Management (14th ed.). McGraw-Hill Education.
3. Iyengar, B. K. S. (2005). Light on Yoga. Thorsons.
4. Iyengar, B. K. S. (2006). Light on Yoga: The Classic Guide to Yoga by the World's Foremost Authority. Thorsons.
5. Jain, D. (2012). Physical Education and Health (2nd ed.). Sports Publications.
6. Kapur, M. (2011). Mental Health of Children in India. Sage Publications.
7. Kumar, K. (2019). Health and Physical Education. Khel Sahitya Kendra.
8. Nagendra, H. R., & Nagarathna, R. (2011). Yoga for Promotion of Positive Health. Swami Vivekananda Yoga Prakashana.
9. Park, K. (2015). Park's Textbook of Preventive and Social Medicine. Banarsidas Bhanot Publishers.
10. Park, K. (2021). Textbook of Preventive and Social Medicine (26th ed.). Banarsidas Bhanot.
11. Saraswati, S. (2008). Asana Pranayama Mudra Bandha (4th ed.). Bihar School of Yoga.
12. Sharma, R. (2013). Health Education: Principles and Practices. Rupa Publications.
13. Sivananda, S. (2008). The Science of Pranayama. The Divine Life Society.
14. Srilakshmi, B. (2018). Nutrition Science (6th ed.). New Age International Publishers.
15. Telles, S., & Nagendra, H. R. (2010). Yoga for Health and Personality (1st ed.). Swami Vivekananda Yoga Prakashana.
16. Tiwari, O. P. (2006). Asana: Why and How?. Kaivalyadhama Ashram.

LANGUAGE ACQUISITION	
Course Code: BELD404	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Foundations of Language Acquisition

- Definition and scope of language acquisition
- Cognitive prerequisites for language acquisition
- Language and thought
- Developmental perspectives of language acquisition
 - Piagetian perspectives
 - Vygotskian perspectives

Unit II: Stages of Language Development

- Stages of Language Development
 - Pre-linguistic stage: cooing, babbling
 - Linguistic stage: one-word stage, two-word stage, telegraphic speech
- Phonology, Morphology, Syntax, Semantics and Sociolinguistic aspects of language acquisition
- Language Disorders: Stuttering, Aphasia, Language among the mentally retarded

Unit III: Comprehension and Production

- Perceptual Strategies
 - Perception of speech and speech comprehension
 - Notions of complexity
- Speech Production
 - Encoding and performance measures
 - The role of errors in language production

Unit IV: Formal Language Acquisition and Literacy

- Reading and Writing
 - Formal means of language acquisition with special reference to reading and writing
 - Learning to read and understand
- Literacy Techniques
 - Measures of readability
 - Schema theory
 - Using cloze, dictation, and translation with children
- Mechanics of Writing
 - Representational systems
 - Teaching writing

Suggested Reading:

1. Chomsky, N. (2009). Language and Mind. Cambridge University Press.
2. Crystal, D. (2010). The Cambridge Encyclopedia of Language. Cambridge University Press.
3. Gupta, R. (2013). A Comprehensive Study of Language Acquisition. Atlantic Publishers.
4. Koul, O. N. (2005). Language, Education and Communication. Bahri Publications.
5. Krashen, S. D. (1985). The Input Hypothesis: Issues and Implications. Longman.
6. Pandit, I. (2001). Language and Development: A Perspective from Linguistics. Sage Publications.
7. Ranganathan, V. (2010). Language and Learning: Indian Contexts. Orient Blackswan.
8. Richards, J. C., & Rodgers, T. S. (2014). Approaches and Methods in Language Teaching (3rd ed.). Cambridge University Press.
9. Singh, R. K. (2002). Bilingualism and Language Teaching. Anmol Publications.
10. Yule, G. (2016). The Study of Language (6th ed.). Cambridge University Press.

PEDAGOGY OF ENVIRONMENTAL SCIENCE	
Course Code: BELD405	Credit: 02 (L-2, T-0, P-0)
Contact Hours: 30	MM: 50 (Int.: 15 + Ext.: 35)

Course Outline

Unit I: Foundations of Environmental Science Education

- Definition and significance of Environmental Studies as a curricular area at the primary level
- Distinction between Environmental Studies and Environmental Education
- Historical evolution of Environmental Studies in the curriculum
- Integration of physical, social, historical, and cultural components in Environmental Studies
- Interdisciplinary nature and relevance to other subject areas

Unit II: Curriculum Development and Teaching Approaches

- Key considerations in developing the Environmental Studies curriculum
- Maxims of teaching and their application in Environmental Studies
- Differences in curriculum construction and transaction for classes I and II compared to classes III to V
- Review and evaluation of various curricular materials, including textbooks

Unit III: Teaching Methods and Evaluation in Environmental Science

- Understanding the 'method of science' and 'process approach' in Environmental Studies
- Planning and organizing effective teaching-learning activities
- Unit and lesson planning in Environmental Studies
- Role of inquiry, experimentation, discussion, and dramatization in teaching
- Methods of evaluating and testing students' understanding and skills in Environmental Studies

Suggested Reading:

1. Agarwal, S. K. (2019). Environmental Education: Principles, Concepts and Management. APH Publishing Corporation.
2. Das, R. C. (2007). Environmental Education and Awareness. Anmol Publications Pvt. Ltd.
3. Palmer, J. A. (1998). Environmental Education in the 21st Century: Theory, Practice, Progress and Promise. Routledge.
4. Sharma, R. C. & Tan, M. L. (2011). Environmental Education for Sustainability. Vikas Publishing House Pvt. Ltd.
5. Singh, Y. K. (2009). Teaching of Environmental Science. APH Publishing Corporation.
6. UNESCO-UNEP. (1978). The Tbilisi Declaration. Connect: UNESCO-UNEP Environmental Education Newsletter.
7. Wilson, E. O. (2006). The Creation: An Appeal to Save Life on Earth. W.W. Norton & Company.

MATHEMATICS II	
Course Code: BELD423	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Descriptive Statistics

- Measures of Central Tendency
 - Mean
 - Median
 - Mode
- Measures of Dispersion
 - Range
 - Quartile Deviation
 - Standard Deviation
 - Deciles
 - Percentiles

Unit II: Relationships between Variables

- Correlation
- Linear Regression

Unit III: Algebra

- Binary Operations
- Commutative and Associative Operations
- Identity Element and Inverse of an Element
- Definition of a Group with Examples
- Simple Properties of a Group
- Subgroups and their Properties
- Generation of Groups
- Cyclic Groups
- Coset Decomposition

Unit IV: Differential Calculus

- Successive Differentiation
- Leibnitz Rule
- Derivatives
- Euler's Theorem on Homogeneous Functions

Suggested Reading:

1. Bhattacharya, P. B., Jain, S. K., & Nagpal, S. R. (1983). First Course in Linear Algebra. Wiley Eastern Ltd.
2. Datta, K. B. (2000). Matrix and Linear Algebra. PHI Pvt. Ltd.
3. Herstein, I. N. (1975). Topics in Algebra. Wiley Eastern Ltd.
4. Narayan, S. (n.d.). Statistics. S. Chand & Company.
5. Singh, S. (n.d.). Modern Algebra. Vikas Publishing House.

POLITICAL SCIENCE II	
Course Code: BELD429	Credit: 04 (L-3, T-1, P-0)
Contact Hours: 60	MM: 100 (Int.: 30 + Ext.: 70)

Course Outline

Unit I: Organization of Government

- Unitary and Federal forms of Government: Meaning, Characteristics, Differences between Unitary and Federal forms of Government
- Parliamentary and Presidential forms of Government: Meaning, Characteristics, Comparison between the two forms
- Democracy and Dictatorship: Meaning and Definition, Characteristics, Comparison between Democracy and Dictatorship

Unit II: Sovereignty

- Meaning and Definition of Sovereignty
- Features of Sovereignty
- Kinds of Sovereignty
- Different Theories of Sovereignty: Monistic Theory, Pluralistic Theory

Unit III: Political Parties and Pressure Groups

- Meaning and Nature of Political parties
- Functions of Political parties
- Types of Party System in India
- Importance of Political Parties in a Democratic State
- Meaning and functions of Pressure Groups
- Importance of Pressure Groups in a Modern democratic State
- Distinction between Political Parties and Pressure Groups

Unit IV: Electorate and Representation

- Universal Adult Franchise
- Women Suffrage
- Territorial Representation
- Proportional Representation

Suggested Reading:

1. Asirvatham, E., & Mishra, K. K. (1936). Political Theory. S. Chand & Company Pvt. Ltd.
2. Bhattacharya, D. C. (2010). Political Theory. Vijaya Publishing.
3. Bhattacharya, M., & Ray, A. (2013). Political Theory: Ideas & Institutions. The World Press Private Limited.
4. Gilbert, M. (2006). A Theory of Political Obligation: Membership, Commitment, and the Bonds of Society. Oxford University Press.
5. Horton, J. (2010). Political Obligation. Palgrave Macmillan.
6. Johri, J. C. (1987). Contemporary Political Theory. Sterling Publisher Private Limited.
7. Kapur, A. C. (1950). Principles of Political Science. S. Chand & Company Pvt. Ltd.
8. Rathore, L. S., & Haqqi, S. A. H. (1990). Political Theory and Organization. Political Science Association.
9. Verma, S. P. (2006). Modern Political Theory. Vikas Publishing House Pvt. Ltd.

CULTURAL ACTIVITIES, SPORTS AND YOGA	
Course Code: BELD451	Credit: 02 (L-0, T-0, P-2)
Contact Hours: 30	MM: 50 (Int.: 15 + Ext.: 35)

The practical course is designed to provide the pupil-teachers with hands-on experience in cultural activities, sports, and yoga. It aims to foster a holistic approach to education by integrating physical, mental, and cultural development. The pupil-teachers will engage in various activities that promote health, teamwork, creativity, and cultural appreciation.

Course Outline

- **Cultural Activities**

- Understanding the importance of cultural activities in holistic education
- Planning and organizing cultural events in the department
 - Activity 1: Traditional Dance and Music
 - Learning and performing a traditional dance form (e.g., folk dance, classical dance)
 - Activity 2: Art and Craft
 - Engaging in art and craft activities such as painting, sculpture, and origami
 - Organizing an art exhibition to showcase student work

- **Sports**

- Understanding the role of sports in physical and mental development
- Organizing sports events and competitions
 - Activity 1: Team Sports
 - Participation in team sports such as basketball, football, or volleyball
 - Understanding rules, techniques, and team strategies
 - Activity 2: Individual Sports
 - Participation in individual sports such as athletics, badminton, or tennis
 - Techniques for improving personal performance
 - Activity 3: Physical Fitness
 - Engaging in fitness activities such as aerobics, gymnastics, or circuit training
 - Understanding the importance of regular physical exercise

- **Yoga**

- Understanding the philosophy and benefits of yoga for physical and mental health
- Basic principles of yoga practice
 - Activity 1: Asanas
 - Learning and practicing basic yoga postures (asanas)
 - Focus on alignment, balance, and flexibility
 - Activity 2: Pranayama
 - Introduction to breathing techniques (pranayama)
 - Practice of different pranayama techniques such as Anulom-Vilom, Kapalbhathi, and Bhramari
 - Activity 3: Meditation and Relaxation
 - Techniques for meditation and mindfulness
 - Guided relaxation practices for stress management

Assessment

- **Participation and Performance**
 - Active participation in all activities
 - Performance in cultural events, sports, and yoga sessions
- **Reflective Journal**
 - Maintaining a reflective journal documenting experiences, learnings, and personal growth through the course
- **Practical Demonstration**
 - Demonstration of skills learned in a final practical assessment, including cultural performance, sports activity, and yoga practice

Course Outline:

It will have three components:

1. Participation in various cultural, sports and yoga activities mentioned in the course outline.
2. Report writing of each activity organized by the department with participation details.
3. Viva-voce at the end of semester.

Note: For successful completion of the course, all three components are compulsory.

SCHOOL OBSERVATION I	
Course Code: BELD471	Credit: 02 (L-0, T-0, P-0)
Contact Hours: Two Weeks	MM: 50 (Int.: 15 + Ext.: 35)

The practical course is designed for pupil-teachers to gain first-hand experience and understanding of the school environment, teaching practices, and classroom dynamics. Through structured observation, students will develop critical insights into the functioning of schools and the practical aspects of teaching.

Course Outline

- **Pre-Observation Preparation**
 - Orientation
 - Introduction to the course objectives and expectations
 - Overview of observation techniques and tools
 - Developing an observation checklist
- **School Observation**
 - Classroom Observation
 - Observing different classes across various grades
 - Focus on teaching methods, classroom management, and student interactions
 - Observation of Teacher Roles and Responsibilities
 - Observing teacher-student interactions
 - Understanding lesson planning and execution
 - Analyzing assessment and feedback methods
 - Observing School Culture and Environment
 - Observing school routines and activities
 - Understanding the role of administrative staff
 - Participation in extracurricular activities
- **Post-Observation Analysis**
 - Reflection and Reporting
 - Writing detailed observation reports
 - Reflecting on key observations and learning outcomes
 - Discussions and Feedback Session
 - Sharing experiences with peers upon returning from school observation
 - Discussing challenges and best practices observed
 - Receiving feedback from faculty supervisors
 - Discussing ways to improve observation and analysis skills

Assessment

- **Observation Reports**
 - Detailed reports on classroom and school observations (50%)
- **Reflection Essays**
 - Written reflections on key learnings and personal growth (30%)
- **Participation and Engagement**
 - Active participation in discussions and feedback sessions (20%)

Course Outline:

1. Participation in all activities of School Observation (Pre-observation Preparation, During Observation and Post-observation Analysis) as mentioned in course outline.
2. Recording of minimum 20 lessons (10 for each teaching subject).
3. Maintenance of record of school observation (Observation Reports and Reflective Essays) with brief report about school.
4. Viva-voce at the end of semester.

Note: For successful completion of the course, Participation in all activities of School Observation is compulsory.