

National Curriculum and Credit Framework (NCCF)

Syllabus For
VALUE ADDED COURSES (VAC)
FOR ALL DISCIPLINE

w.e.f. Academic Session 2023-24



Kazi Nazrul University
Asansol, Paschim Bardhaman
West Bengal 713340

Semester – IV

Offered by PHYSIOLOGY

Course Name: Yoga and Health(Theory)

Course Code: VAC401

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|------------------------------|------------------------------|-----------|-------------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | | 15 | | 35 |

Unit 1: Introduction to Yoga (10 marks)

- 1.1 Definition and history of yoga
- 1.2 Principles and philosophy of yoga
- 1.3 Types of yoga (Hatha, Vinyasa, Ashtanga, etc.)
- 1.4 Physiological effects of yoga on body systems
- 1.5 Neurological and psychological benefits of yoga
- 1.6 Research studies on yoga and health

Unit 2: Yoga Techniques (8 marks)

- 2.1 Asanas (postures) for physical health
- 2.2 Pranayama (breathing techniques) for mental well-being
- 2.3 Mudras (hand gestures) and Bandhas (energy locks)
- 2.4 Relaxation techniques (Savasana, Yoga Nidra)

Unit 3: Yoga for Stress Management (10 marks)

- 3.1 Understanding stress and its effects
- 3.2 Yoga practices for stress relief (asanas, pranayama, meditation)
- 3.3 Mindfulness and self-awareness techniques

Unit 4: Applications of Yoga in Modern Life (7 marks)

- 4.1 Yoga in daily life (workplace, relationships, etc.)
- 4.2 Yoga for specific health conditions (back pain, hypertension, etc.)
- 4.3 Yoga and mental health (anxiety, depression, etc.)

Offered by **PHILOSOPHY**

Course Name: **Social Values and Ethics**

Course Code: **VAC402**

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|--------------------------|-----------------------|-----------|------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | -- | 15 | -- | 35 |

➤ **Course objective:**

- Development of a positive character, empathetic human being, responsible citizen, a compassionate and empathetic being.
- Understanding virtues of volunteerism.
- Promoting a sustainable life style for the individual, community and man kind
- Developing a sense of right and wrong leading to practical ethical behavior
- Inculcating a positive work culture respecting professional ethics
- Inculcating Leadership
- To build the sense of Right and Wrong. Both ethically and constitutionally
- To develop power of Judgment amongst students.
- Evolving sense of patriotism among students
- To facilitate growth of an empathetic and compassionate personality.

➤ **Course Outcome:**

- This syllabus provides a comprehensive foundation in social values and ethics, equipping students with the knowledge and skills to navigate ethical challenges in various aspects of life.

Suggested Topics:

• **UNIT-I**

- ❖ **Introduction to Ethics:** Definition, scope, and importance of ethics in society
- ❖ **Moral Philosophy:** Concepts of right and wrong, good and evil, moral relativism.

• **UNIT-II**

- ❖ **Social Values:** Definitions, importance, and Sources of Value Systems (family values, cultural values, etc.).

• **UNIT-III**

- ❖ **Civic virtue:** Respect for others, Caring, Sharing, Cooperation, Commitment, Empathy, Human Dignity

• **UNIT-IV**

- ❖ **Personal Ethics:** Integrity, honesty, responsibility, and moral courage.
- ❖ **Professional Ethics:** Ethical codes in various professions (medicine, law, business).
- ❖ **Workplace Ethics:** Fairness, equality, diversity, and conflict resolution
- ❖ **Concept of Social Justice:** Equality, equity, and access to resources.

- **References:**

- W. Frankena, (1973). *Ethics* (2nd ed). Prentice Hall of India Private Limited, Delhi.
- W. Lillie, (1955). *An Introduction to Ethics*. University Paperbacks. London.
- International Human Resource Management by Peter j Dowling, Devis E Welch, 4th Edition.
- S. K. Maitra,(1963). *Ethics of the Hindus*. Calcutta University Press, Kolkata.
- MacIntyre, A. (2007). *After Virtue: A Study in Moral Theory* (3rd ed.). University of Notre Dame Press.
- Sandel, M. J. (2010). *Justice: What's the Right Thing to Do?* Farrar, Straus and Giroux.
- Rawls, J. (1999). *A Theory of Justice* (Revised ed.). Harvard University Press.
- Nussbaum, M. C. (2001). *Upheavals of Thought: The Intelligence of Emotions*. Cambridge University Press.
- Singer, P. (2011). *Practical Ethics* (3rd ed.). Cambridge University Press.
- Aristotle. (2002). *Nicomachean Ethics* (J. A. K. Thomson, Trans.; H. Tredennick, Rev. ed.). Penguin Classics. (Original work published ca. 340 B.C.E.)
- Dewey, J. (1997). *The Public and Its Problems*. Swallow Press.
- Habermas, J. (1996). *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (W. Rehg, Trans.). MIT Press.
- Gilligan, C. (1982). *In a Different Voice: Psychological Theory and Women's Development*. Harvard University Press.
- Taylor, C. (1989). *Sources of the Self: The Making of the Modern Identity*. Harvard University Press.
- Kant, I. (2002). *Groundwork for the metaphysics of morals* (A. W. Wood, Trans.). Yale University Press. (Original work published 1785)
- Mill, J. S. (2001). *Utilitarianism*. Hackett Publishing Company. (Original work published 1863)
- Cahn, S. M., & Markie, P. (Eds.). (2016). *Ethics: History, theory, and contemporary issues* (6th ed.). Oxford University Press.
- Rachels, J., & Rachels, S. (2019). *The elements of moral philosophy* (9th ed.). McGraw-Hill Education.
- Sandel, M. J. (2010). *Justice: What's the right thing to do?* Farrar, Straus and Giroux.
- Beauchamp, T. L., Bowie, N. E., & Arnold, D. G. (2013). *Ethical theory and business* (9th ed.). Pearson.
- Sen, A. (2009). *The idea of justice*. Harvard University Press.
- Clapham, A. (2007). *Human rights: A very short introduction*. Oxford University Press.

Offered by **COMPUTER SC.**

Course Name: Digital and Technological Solutions

Course Code: VAC403

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|----------------------------------|--------------------------|-----------|--------------|-----------|-------------|
| Course Type: VA (Theoretical) | Course Details:VAC-2 | | L-T-P: 4-0-0 | | |
| Credit: 4 | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | | 15 | | 35 |

Course Content:

Theory

UNIT I: Introduction & Evolution of Digital Systems. Role & Significance of Digital Technology. Information & Communication Technology & Tools. Computer System & its working, Software and its types. Operating Systems: Types and Functions. Problem Solving: Algorithms and Flowcharts. Communication Systems: Principles, Model & Transmission Media. Computer Networks & Internet: Concepts & Applications, WWW, Web Browsers, Search Engines, Messaging, Email, Social Networking. Computer Based Information System: Significance & Types. E-commerce & Digital Marketing: Basic Concepts, Benefits & Challenges.

UNIT II: Digital India & e-Governance: Initiatives, Infrastructure, Services and Empowerment. Digital Financial Tools: Unified Payment Interface, Aadhar Enabled Payment System, USSD, Credit / Debit Cards, e-Wallets, Internet Banking, NEFT/RTGS and IMPS, Online Bill Payments and PoS. Cyber Security: Threats, Significance, Challenges, Precautions, Safety Measures, & Tools, legal and ethical perspectives. Emerging Technologies & their applications: Overview of Cloud Computing, Big Data, Internet of Things, Virtual Reality, Blockchain & Cryptocurrency, Robotics, Machine Learning & Artificial Intelligence, 3-D Printing. Digital Signatures.

References/ Suggested Readings:

1. V. Rajaraman, Introduction to Information Technology, 3rd Edition, PHI;
2. E Balagurusamy, Fundamentals of Computers, Tata Mc GrawHill;
3. Behrouz A. Forouzan, Data Communications and Networking, McGraw Hill;
4. Pramod Kumar, Anuradha Tomar, R. Sharmila, Emerging Technologies in Computing Theory, Practice, and Advances, Edition 2021, Chapman and Hall/CRC Imprint;
5. Buyya, Broberg, and Goscinski, Cloud Computing- Principals and Paradigms, Wiley
6. Russel and Norving, Artificial Intelligence- A Modern Approach, Pearson Education;
7. Samuel Greengard, Internet of Things, MIT Press;
8. C.S.V. Murthy, E-commerce Concepts, Models, Strategies;
9. Hurwith, Nugent Halper, Kaufman, Big Data for dummies, Wiley & Sons - Wiley.

Offered by HISTORY

COURSE NAME: Understanding India

COURSE CODE: VAC404

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|---------------------------------|------------------------------|-----------|-------------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | -- | 15 | -- | 35 |

Course learning outcomes:

The course will enable students to gain knowledge about:

1. The land and people of India
2. Creative genius of the Indian min: Architecture, painting, dance, and music
3. Heterogeneous ideas within India's struggle for freedom
4. India's scientific achievements through ages
5. Basic structure of the Indian Constitution

UNIT 1

Introducing India: The Land and the People

- 1.1 Geographical setting: Jambudvipa, Bharatvarsha, Hind, India, Hindustan
- 1.2 People of India: Linguistic, cultural, and religious diversity

UNIT 2

Idea of India: Different Perspectives

- 2.1 Literature: *Mahabharata*, Amir Khusrau, Abul Fazl, Rabindranath Tagore
- 2.2 Architecture and Painting: Mahabalipuram, Ajanta, Ellora, Mughal miniatures, Raja Ravi Varma, Abanindranath Tagore, Madhubani art
- 2.3 Dance and Musical traditions: Chau, Kirtan

UNIT 3

Makers of India's Scientific Tradition: Select Case Studies

- 3.1 Early thinkers: Aryabhata, Kanad, Charaka
- 3.2 Medieval practices in astronomy and medicine
- 3.3 Modern masters: C. V. Raman, Srinivasa Ramanujan, Meghnad Saha, S. S. Bhatnagar, Homi J. Bhabha, Vikram Sarabhai, Janaki Ammal, M. S. Swaminathan

UNIT 4

Many Voices within India's Freedom Struggle

- 4.1 Swadeshi and Militant nationalism
- 4.2 Gandhi: Principles of non-violence
- 4.3 B. R. Ambedkar: Dalit Question
- 4.4 Sarojini Naidu: Women and the nation

UNIT 5

The Indian Constitution

- 5.1 Idea of democracy and genesis of the constitution
- 5.2 Key Concepts: Preamble, fundamental rights, directive principles, fundamental duties

References :

1. M. Athar Ali, 'The Evolution of the Perception of India: Akbar and Abul Fazl' in *Mughal India: Studies in Polity, Ideas, Society, and Culture*, New Delhi, OUP, 2006
2. Brajadulal Chattopadhyaya, *The Concept of Bharatvarsha and Other Essays*, Ranikhet, Permanent Black, 2017
3. B.R. Ambedkar, *Annihilation of Caste* (The Annotated Critical Edition), ed. by S. Anand, Verso Books, 2014
4. Granville Austin (ed.), *The Indian Constitution*, Oxford, 1999
5. Sekhar Bandyopadhyay, *From Plassey to Partition and After*, New Delhi, Pearson, 2004
6. A.L. Basham, *The Wonder that was India*, Picador, 2004
7. _____, *Studies in Indian History and Culture*, Calcutta: Sambodhi Publications Private Ltd., 1964
8. _____ (ed.), *A Cultural History of India*, OUP, 1975
9. Bipan Chandra, Mridula Mukherjee, and Aditya Mukherjee, *India Since Independence*, Penguin, 2008
10. Geraldine Forbes, *Women in Modern India*, Cambridge, CUP, 1996 (The New Cambridge History of India series)
11. M.K. Gandhi, *Hind Swaraj and other Writings*, Cambridge, 1997
12. Ramachandra Guha (ed.), *Makers of Modern India*, Penguin, 2012
13. _____, *India after Gandhi: A History*, 3rd edn, Pan Macmillan, 2023
14. Irfan Habib (ed.), *India — Studies in the History of an Idea*, New Delhi, AHS & Munshiram Manoharlal, 2004
15. Mohammad Habib, *Hazrat Amir Khusrau of Delhi*, Bombay, D.B. Taraporevala Sons & Co. Pvt. Ltd., 1927
16. Madhav Khosla, *The Indian Constitution*, Oxford, 2012 (VSI series)
17. Radha Kumar, *History of Doing*, New Delhi, Zubaan, 2014
18. Bimala Churn Law, *Historical Geography of Ancient India*, Paris, Societe Asiatique de Paris, 1968
19. Jawaharlal Nehru, *The Discovery of India*, Penguin, 2008
20. Gail Omvedt, *Dalits and the Democratic Revolution: Dr. Ambedkar and the Dalit Movement in Colonial India*, Sage, 2014
21. S.A.A. Rizvi, *The Wonder that was India*, Vol. II, Picador, 2005
22. Valerian Rodrigues (ed.), *The Essential Writings of B.R. Ambedkar*, Oxford, 2004
23. Sumit Sarkar, *The Swadeshi Movement in Bengal, 1903-1908*, New Delhi, People's Publishing House, 1973
24. _____, *Modern India*, New Delhi, Macmillan, 1982
25. Sumit Sarkar and Tanika Sarkar (ed.), *Women and Social Reform in Modern India: A Reader* (2 vols.), Permanent Black, 2011
26. Sunil Sharma, 'Amir Khusraw and the Genre of Historical Narratives in Verse', *Comparative Studies of South Asia, Africa and the Middle East*, 22, 1-2 (2002), pp. 112-18
27. Dineschandra Sircar, *Studies in the Geography of Ancient and Medieval India*, New Delhi, Motilal Banarasidass, 1971
28. Upinder Singh, *The History of Ancient and Early Medieval India*, New Delhi, Pearson, 2008
29. কণাদ সিংহ, *ইন্ডিয়া বনাম ভারত এবং অন্যান্য প্রবন্ধ*, কলকাতা, পঞ্চালিকা প্রকাশনী, ২০২৪
30. সমরেন্দ্রনাথ সেন, *বিজ্ঞানের ইতিহাস* (২ খণ্ড), কলকাতা, ইন্ডিয়ান অ্যাসোসিয়েশন ফর দ্য কার্টিভেশন অফ সায়েন্স, ১৯৫৫-৫৮

Offered by **ECONIMICS**

Course Name: Sustainable Development: Issues and Challenges

Course Code: VAC-405

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|-------------------------------------|------------------------------|-----------|-------------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | -- | 15 | -- | 35 |

Course Learning Outcomes

(After the completion of the course the students will be able)

1. To gain idea about economic development and the importance of sustainability in development
2. To acquire knowledge about Sustainable Development Goals
3. To become aware about the rules and framework and challenges to sustainable development
4. To learn about the strategies that exist for sustainable development

Content/ Syllabus: Unit wise course content distribution

Unit 1: Introduction

- Economic Development and Sustainability- concept of environmentalism
- Stockholm Conference 1972, development of international environmental policy, Earth Summit 1992 and the formulation of the concept of Sustainable Development
- Agenda 21 and SDGs
- Components of sustainable development, environment-economy interaction, the circular economy

Unit 2: Challenges to Sustainable Development

- Rules and framework for Sustaining Development, MDGs
- Exhaustible resources and Renewable resources, Natural resources- Natural Capital Stock, the meaning of constant capital stock
- Externality, environmental pollution as an externality, optimal level of pollution, common property resources, Coase theorem
- Trans-boundary environmental problem, Climate Change, Kyoto Protocol

Unit 3: Practices and Strategies for Sustainable Development

- Environmental standards, Taxes and Subsidies
- Pollution Charges and Abatement Costs, Marketable Pollution Permits
- Role of inclusive and participatory management in sustainable development, Sustainable practices in agricultural, industrial, rural and urban development

- Environmental Education and environmental ethics, Environmental conservation policies and Discounting for the future

References/Suggested Readings

1. Our Common Journey: A Transition Toward Sustainability. National Academy Press, Washington D.C. Subbotina, T. P. 2004.
2. Elliott, Jennifer. 2012. An Introduction to Sustainable Development. 4th Ed. Routledge, London.
3. Rogers, Peter P., Kazi F. Jalal, and John A. Boyd. "An introduction to sustainable development." (2012).
4. Sachs, J. D. 2015. The Age of Sustainable Development. Columbia University Press, New York
5. David W. Pearce and R. Kerry Turner, (1990) Economics of Natural Resources and the Environment, Johns Hopkins University Press.

Semester – IV

Offered by

COMMERCE

Course Name: Goods and Services Tax

Course Code: VAC406

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|------------------------------|------------------------------|-----------|-------------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | -- | 15 | -- | 35 |

Semester – IV

Offered by

POLITICAL SCIENCE

Course Name: Basics of Indian Constitution

Course Code: VAC407

| Course Type: VA | Course Details: VAC-2 | | L-T-P: 4 - 0 - 0 | | |
|------------------------------|------------------------------|-----------|-------------------------|-----------|-------------|
| Credit: 4 Theoretical | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | -- | 15 | -- | 35 |

Course Objectives

1. The main purpose of the course is to familiarize the student with the key elements of Indian constitution.
2. The course has been designed to cover the journey of the map of India that emerge from partition to subsequent integration of princely states and how the decision on the key significant symbols such as national flag, national anthem, national song, etc. of the Constitution was arrived at through comprehensive debate in the Constituent Assembly.
3. Students also understand the fundamental rights and duties of the citizens, directive principles of State policy, nature of Indian federalism and other institution as described by the Constitution of India.

Content: Unit wise course content distribution

Theory

Unit - 1: Framing of the Indian Constitution: Role of the Constituent Assembly; Features of Indian Constitution; the Preamble

Unit - 2: Fundamental rights and duties; Directive principles of State policy.

Unit - 3: Nature of Indian Federalism: Constitutional provisions; changing nature of center-state relations.

Unit - 4: Organs of Constitutional Governance- Legislature (Lok Sabha & Rajya Sabha), Executive (The President, Prime Minister and Vice President) and Judiciary (Supreme Court) in India: Composition, procedure, powers & functions.

Unit - 5: Constitutional amendment: Procedures; Election Commission of India.

Learning Outcomes

1. Students will be able to know the importance of the preamble in the constitutional design of India.
2. Students will be able to know the fundamental rights and duties of the Indian citizens.
3. Students also know about the nature of the Indian federalism and all about the union state relationship in India.
4. Student will be able to know the legislative process of India.
5. Students also able to answer the questions about the functions and role of the President, Prime Minister and Parliament

Suggested Readings

1. D.D. Basu, *Introduction to the Constitution of India*, (Nagpur: Lexis Nexis).
2. S.C. Kashyap, *Our Constitution*, (New Delhi: National Book Trust).
3. S.C. Kashyap, *Our Political System*, (New Delhi: National Book Trust).
4. G.C. Hiregowder, et al., *The Indian Constitution: An Introduction*, (New Delhi: Orient Black Swan).
5. J.C. Johari, *Indian Government and Politics, Vol. I & II* (New Delhi: Vikash Publication).
6. Madhab Khosla, *The Indian Constitution*, (New Delhi: Oxford).

Offered by PHYSICAL EDUCATION

Course Name: Integrated Self Defense

Course Code: VAC408

| | | | | | |
|---|------------------------------|-----------|-------------------------|-----------|-------------|
| Course Type: Value-added (Practical) | Course Details: VAC-2 | | L-T-P: 0 – 1 – 6 | | |
| Credit: 4 | Full Marks: 50 | CA Marks | | ESE Marks | |
| | | Practical | Theoretical | Practical | Theoretical |
| | | 30 | | 20 | |

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| <p>Objectives:</p> <ul style="list-style-type: none">i. To prepare students for self-protection.ii. Students will learn physical and mental strength endurance. <p>Outcomes:</p> <ul style="list-style-type: none">i. Students may motivate themselves for regular self-defense practice.ii. Students may take this knowledge and experience to the greater society. |
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Unit 1 : KARATE

- 1.1 Warming-up: General and Specific, Fundamental Skills: Hand and leg position
- 1.2 Player Stances: Front leaning, Balance, Walking, Side-fighting.
- 1.3 Hand Techniques: Punches (straight punch, reverse punch), Blocks (eight basic)
- 1.4 Leg Techniques: Snap kicks, stretching straight leg, thrust kick, sidekicks, roundhouse.

Unit 2 : TAEKWONDO

- 2.1 Warming-up: General and Specific
- 2.2 Fundamental Skills: Walking, extending walking, L stance, cat stance.
- 2.3 Punches: Sitting stance punch, single punch, double punch, triple punch, front-fist punch, rear-fist punch.
- 2.4 Foot techniques (Balgisul): Standing kick (soseochagi), Front kick (AP chagi), Arc kick (Bandal Chagi), Sidekick (Yeop Chagi), Turning kick (Dollyo Chagi), Back kick (Twit Chagi), Reverse turning kick (Bandae Dollyo Chagi), Jump kick (Twimyo Chagi).

Unit 3 : Raibenshe

- 3.1 Hand exercise: One hand, Two hands, Combined hands
- 3.2 Leg exercise: One leg, Two legs, and Combined legs
- 3.3 Whole-body exercise: Front side, Back side, and Combined
- 3.4 Exercise with equipment: Mugur, Lathi, and Ranpa

Reference:

- Funakoshi, G. (2009). Karate-do: My way of life. Kodansha International.
- Nakayama, H. (1999). Best Karate: Comprehensive illustrated guide to basic techniques. Kodansha International.
- Clausen, D. (2017). The complete Karate handbook: Techniques, tactics, and strategies. Tuttle Publishing.
- Lee, H. (2016). Taekwondo: The essential guide. Tuttle Publishing.
- Lee, K. H., & Uhm, H. (2020). Taekwondo: The Korean martial art. Black Belt Books.
- Kwon, B. (2018). Taekwondo: A step-by-step guide. Paladin Press.
- Mohan, R. (2014). Indian martial arts: Traditions and practices. Arya Publishing House.
- Sharma, P. (2015). The art of Indian martial systems: A guide to traditional practices. Vikas Publishing.
- Srinivasan, R. (2017). Traditional Indian martial arts: History and practice. Wisdom Publications.
- Raj, A. (2020). Raibenshe: Techniques and traditions of a forgotten martial art. Lotus Press.
- Verma, S. (2019). Martial arts of India: A comprehensive guide. Penguin India.