

B.O.S. DATE 18/05/2023

B.O.S. ITEM NO. 01 AC NO/

ACADEMIC COUNCIL DATE 27/06/2023

ACADEMIC COUNCIL ITEM NO. 02



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR

Arts Commerce and Science College, New
Panvel

**(AUTONOMOUS)
SYLLABUS**

For

**First Year NCC SEM I and SEM II
(W.e.f. 2023-24)**

Syllabus for
First Year Programs of
Arts/Science/Commerce Faculties
Course – NCC Studies

- i. Name of the Program First Year Programs of
Arts/ Science/Commerce Faculties
- ii. Course code Arts -UAR1NCC & UAR2NCC
Science-USC1NCC& USC2NCC
Commerce- UCM1NCC & UCM2NCC
A/F- UAF1NCC & UAF2NCC
BMS- UMS1NCC & UMS2NCC
- iii. Course Title - NCC Studies
- iv. Semester wise course content - 1 & II Semesters
- v. Credit Structure - 2 Credits per Semester
- vi. No. of lectures per unit - 30 lectures per Semester for 3 Units
- vii. No. of lectures per week - **2**lectures per week

Preamble: NCC Studies

The National Cadet Corps came into existence immediately after independence; the Kashmir war of 1948 was a bitter pill prompting the Govt. of India to reappoint the Kunjru Committee whose recommendations were instrumental in the inception of NCC on the 16th July 1948. The government of India accepted recommendations of the committee and prepared a bill. This bill passed by the parliament and made national Cadet Corps Act, under this act NCC was opened in Schools and Colleges. To widen the scope of the NCC training, a Girl division in 1949, Air wing in 1952 and Navy wing during 1952 were established. However, with voluntary enrolment recommenced in 1966, presently 1.35 million cadets are enrolled with the plans of raising the strength to 1.5 million, spread over 788 units fewer than 95 NCC groups lead by ADG/DDG of the ranks of Major General/Brigadier equivalent in 17 Regional Directorates under the DG NCC who is of the rank of Lieutenant General. National Cadet Corps act as an interface for building a sense of patriotism, secular values, national unity and social cohesion among the youth has also provided an effective channel contributing qualitatively to the Armed Forces. If the practice of physical training, which is in vogue, is supplemented with a pedagogy that encompasses mental & intellectual inputs, the quality of this largest uniformed voluntary youth organization in the world shall be enhanced manifold.

While introducing 'NCC Studies' as an optional subject for F.C. the same philosophy is adhered to, where the syllabus apart from having social relevance in the Indian milieu has emphasis on the overall development of personality. Moreover, with the academic acknowledgement, the cadets will be better equipped to take up careers in civil services, defense, paramilitary, police and security forces further prompting increased demand by the students, augmenting recruitment standards of NCC.

The students are thus provided with quality learning experience through meticulously planned curriculum with a perfect blend of theoretical knowledge & practical skills.

The 'NCC Studies' involves exposure to a range of subjects from Humanities to Science and Technology, apart from the Military Subjects taught both theoretically and practically.

The theory and practical components of specialized subjects of Army, Navy and Air force, shall be imparted both in the classroom and on the field including the camps, ensuring 'Learnt be practiced'.

The entire syllabus shall be covered by the concerned teachers and the Permanent Instructors (PI staff), deputed by the NCC. While the teacher is expected to give emphasis on the classroom teaching, expertise

of PI, shall be utilized for the instructional and practice sessions

The entire course shall be covered during the NCC parades which may preferably be arranged during the working days, covering 45 periods per semester with a total of 90 periods per year. The programme is divided into two semesters per academic year, with two credits per semester and four credits in an academic year. This programme is categorized into six units per semester and a total of twelve units in an academic year.

Institutional training, Camp training, Social services and Community development, Adventure based learning, Sports, Personality development, Youth exchange programmes are the various facets which shall form the components of this course.

The pattern of evaluation will be in the form of continuous assessments and will comprise of internal and external assessment.

NOTE: The NCC 'B' and 'C' Certificate examinations are independent of the college examinations which are separately conducted by the NCC unit

Objectives of NCC Course:

- To inculcate positive thinking, and to provide an ideal platform for the youth to showcase their potential in nation building
- Mould the youth into united secular and discipline citizens of the nation
- To provide a suitable environment to motivate the youths to take up a Career in Armed forces
- To train the students, to be graduates with all-round development, who, apart from their own subject, can successfully compete in other fields of career such as defence / paramilitary/ police forces & civil services

Outcome of NCC Course:

- Trained and disciplined citizens will be developed.
- Physical fitness and overall personality of the youth will be enhanced.
- Students will be trained to develop their careers in defense / paramilitary/ police forces & civil services

Semester I

Course – UG NCC 101

Unit 1: Introduction to NCC, National Integration & Awareness 10

Objective: To create evolved youth, who will be equipped to contribute to the development of the nation.

Desired outcome: The students will display a sense of patriotism, secular values and shall be transformed into motivated youth who will contribute towards nation building through national unity and social cohesion.

- i. Historical development of Military history in India (world war I & II, War after Independence)
- ii. Genesis, Aims, Objectives of NCC & NCC Song
- iii. Incentives & Benefits
- iv. Present scenario of NCC and its advantages in career building
- v. NCC Camps
- vi. Religions, Culture, Traditions and Customs of India
- vii. National integration, necessity

Unit 2: Environment Awareness - Conservation, Social Awareness and Community Development 10

Objective: To make students aware of the protection and conservation of the environment and to teach the values and skills involved in providing voluntary social service.

Desired outcome: The student will be aware of the conservation of natural resources and protection of Environment. The student shall have an understanding of social service and its need, about NGOs and shall participate in community action programmes for betterment of the community.

- i. Natural Resources – Conservation and Management
- ii. Water Conservation and Rainwater Harvesting
- iii. Basics of Social Service, Weaker Sections of Our Society and Their Needs
- iv. Social/ Rural Development Project: MNREGA, SGSY
- v. Contribution of Youth towards Social Welfare
- vi. Civic Responsibilities and Human rights
- vii. Types of Pollution, Forest Ecology, and Waste Management

Objective: To impart basic military training, develop awareness about the defense forces and expose learners to military ethos/values.

Desired outcome: The training shall instill patriotism, commitment and passion to serve the nation motivating the youth to join the defense forces.

A) Drill

- i. General and Words of Command
- ii. Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt
- iii. Saluting at the Halt, Getting on Parade, Dismissing and Falling Out

B) Communication

- i. Types of Communications
- ii. Characteristics of Wireless Technologies (Mobile, Wi-Fi etc.)

C) Armed Force

- i. The basic organization of Armed Forces
- ii. Organization of Army
- iii. Badges and Ranks
- iv. Leadership and Biographies of War Heroes

OR

Unit 4: Specialized subject (NAVY)

A. Naval orientation and service subjects

- i. History of the Indian Navy-Pre and Post-Independence, Gallantry award winners
- ii. Organization of Navy- NHQ, Commands, Fleets, Ships and shore establishments
- iii. Types of Warships and their role
- iv. Organization of Army and Air Force- Operational and Training commands
- v. Ranks of Officers and Sailors, Equivalent Ranks in the Three Services

B. Ship and Boat Modelling

- i. Principles of Ship Modelling
- ii. Maintenance and Care of tools

C. Search and Rescue

- i. SAR Organization in the Indian ocean

OR

Unit 4: Specialized subject (AIR)

A. General Service Knowledge

- i. Development of Aviation
- ii. History of IAF

B. Principles of Flight

- i. Introduction
- ii. Laws of Motion
- iii. Glossary of Terms.

C. Airmanship

- i. Introduction
- ii. Airfield Layout
- iii. Rules of the Air
- iv. Circuit Procedure
- v. ATC/RT Procedures
- vi. Aviation Medicine

Semester II
Course UG NCC 102

Unit 1: Adventure Training & Disaster Management

10

Objective: To inculcate spirit of adventure, undertake adventure activities, to hone leadership qualities and risk taking abilities and to empower and train youth to be responsible citizens and assist civil administration in performance of selective duties during disaster.

Desired outcome: The students will overcome fear & inculcate within them the sense of adventure, sportsmanship and develop confidence, courage, determination, diligence and quest for excellence. As well as students shall gain basic information about civil defense organization / NDMA & shall provide assistance to civil administration in various types of emergencies during natural/manmade disasters

- i. Obstacle course, Scuba diving, Trekking, Cycling, Rock Climbing.
- ii. Civil Defense & NGO, NDMA: Its Duties
- iii. Types of Disasters (Natural & Man-made Disaster)
- iv. Types of essential services
- v. Assistance during Natural / Other Calamities: Flood / Cyclone / Earth Quake / Accident / pandemic etc.
- vi. Responsibilities of NCC cadet for the development of our society

Unit 2: Health and Hygiene and First Aid

10

Objective: To instill respect and responsibility towards personal health and hygiene.

Desired outcome: The student shall be fully aware about personal health and hygiene lead a healthy life style and foster habits of restraint and self-awareness.

- i. Hygiene and Sanitation (Personal and Food Hygiene)
- ii. Infectious & Contagious Diseases & Their Prevention
- iii. Common injuries and first aid
- iv. Important of Yogic Kriya's
- v. (Cardio Pulmonary Resuscitation) CPR Demonstration

Objective: To impart elementary knowledge about rifles and to train students so as to achieve their physical, mental, psychological, and emotional development and to impart basic military training, to develop awareness about the defense forces and expose learners to military ethos/values

Desired outcome: The student shall have basic knowledge of weapons and their use and handling as well as students will demonstrate a sense of discipline, improve bearing, smartness, and turnout, and develop the quality of immediate and imp obedience to orders, with good reflexes. The training shall instill patriotism, commitment, and passion to serve the nation motivating the youth to join the defense forces.

Weapon Training

- i. Characteristics of a Rifle / Rifle Ammunition and its Fire Power
- ii. Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle and 7.62mm rifle
- iii. Map reading: Introduction to types of Maps and Conventional signs
- iv. Field Craft and Battle Craft - Introduction
 - a. Judging distance, Description of ground, Recognition
 - b. Field Signals
 - c. Battle drill, section battle drill, Field Defense and Ambush

OR

Unit 11: Specialized subject (NAVY)**A. Naval Communication**

- i. **Introduction to Naval Modern Communication, Purpose and Principles**
 - a. Introduction of Naval communication
 - b. Duties of various communication sub-departments
- ii. **Semaphore**
 - a. Introduction of position of letters and pro-signs
 - b. Reading of messages
 - c. Transmission of messages

B. Seamanship**A.Anchor work**

- i. Parts of Anchor and Cable, their identification

B.Rigging

- i. Types of ropes and breaking strength- stowing, maintenance and securing of ropes

- ii. Practical Bends and Hitches: Reef Knot, Half hitch, Clove Hitch, Rolling Hitch, Timber Hitch, Bow Line, Round Turn and Two half hitch, and Bow line on the Bight and its basic

elements and uses.

- iii. Introduction to Shackles, Hooks, Blocks and Derricks, Coiling Down and Splicing of rope

C. Boat work

- i. Parts of Boat and Parts of an Oar
- ii. Instruction on boat Pulling- Pulling orders
- iii. Steering of boat under oars, Practical instruction on Boat Pulling, Precautions while pulling

OR

Unit 11: Specialized subject (AIR)

A. Air frames

- i. Aircraft Controls
- ii. Landing Gear

B. Instruments

- i. Basic Flight Instruments

C. Aircraft Particulars

- i. Aircraft Particulars (Type specific)

D. Aero modelling

- i. History of Aero modelling
- ii. Materials used in Aero modelling
- iii. Type of Aero models
- iv. Flying/ Building of Aero models

Distribution of periods

| <u>Semester –I</u> | | <u>Semester –II</u> | |
|--------------------|----------------|---------------------|----------------|
| <u>Unit</u> | <u>Periods</u> | <u>Unit</u> | <u>Periods</u> |
| 1 | 10 | 1 | 10 |
| 2 | 10 | 2 | 10 |
| 3 | 10 | 3 | 10 |
| Total | 30 | Total | 30 |

References and Additional Reading

References

| Title | Authors | Publication |
|---|----------------|---|
| Cadet's Hand book – Common subject..All wings. | | BY DG NCC, New Delhi. |
| Cadet's Hand book – Specialised Subjects, Army, Navy, Air-force | | BY DG NCC, New Delhi |
| NCC OTA Precise | | BY DG NCC, New Delhi |
| “AVAN” Model of Disaster Mang. | Vinayak Dalvie | Proceedings of Int. Conf. on Urban Plan. and Env Strat & Challenges, Elphinstone College, Jan 2007. |

Additional Reading

| | | |
|--|---|---|
| Humanistic Tradition of India | N.L.Gupta | Mohit Publication, New Delhi |
| Social psychology | Baron & Byrne | Pearson Publication, 12 th Edition self awareness know yourself / insight (110) Group & Individuals (374) Group discussion |
| Chanakya's 7 Secrets of Leadership | Radhakrishanan Pillai and D.Shivnandhan | Jaico |
| Social Psychology: Understanding Human Interaction | Baron, Robert A. | (302/BAR/BYR), 7 th Edition |
| Seven Habits of Highly Effective People. | Covey , Stephen | |
| The Habit of Winning. | Iyer , Prakash | Penguin , India ; 2011 |
| The Goal | Goldratt , Eliyahu | The Northriverpress ; 1994 |
| Freedom Struggle | Chandra Bipin | National Book Trust 1972 |
| Freedom of Religion and The Indian Judiciary | BachalV.M. , Shubhada Saraswat | (362P) |
| India 1996- A Reference Annual Govt. of India | | |
| SahaSoneri Pane | Vinayak D. Savarkar | |
| Environmental Biology and Toxicology | P.D. Sharma. | Rastogi Publication |
| Environmental Science | S.C. Santra | New Central Book Agency |

| | | |
|---|--|--|
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| National Cadet Corps, Youth in Action (Google eBook) | National Cadet Corps (India) | Lancer Publishers, 2003 |
| Youth in Step: History of the National Cadet Corps | V. Longer | Lancer international, 1983 Original from the University of Michigan |
| National Cadet Corps of India | Man Mohan Sharma | Vision Books, 1980 Original from the University of Michigan |
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| Cadet Corps in India: Its Evolution and Impact | Satis Chandra Maikap | Darbari Udyog, 1979 Original from the University of California |
| National Cadet Corps: 100 Years of Distinction | National Cadet Corps (Singapore) | NCC |
| The NCC | Singapore, National Cadet Corps Council | National Cadet Corps Council |
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| Discovery of India | Jawaharlal Nehru | |
| Health and Hygiene | Manoj. J.S. | Agra University Publication |
| Yoga for Healing | Venkateswaran P.S. | Bombay:-Jaico Publishing House-1989 |
| Yoga Illustrated | New Delhi | Ministry of Information and Broadcasting, 1995 |
| Yoga Practice, 1972 | Shivnande Swami | Mumbai:- D.B. Taraporewala 1972 |
| Yoga of Patanjali-1979 | Yardi M.R. | Bhandarkar Oriental Research Institute- 1974 |
| Sustainable Development (An Alternative Paradigm) | Satpathy , N. | KarnavatiPublications , Ahmedabad. |
| Global Partners for Sustainable Development | Pachauri R.K & Srivastava L. | Tata Energy Research Institute, New Delhi ; 1994, 1998 |
| Ecology and the Politics of survival : Conflict over Natural Resources in India | Shiva , Vandana | Sage Publications , California , 1991 |

Revised Scheme of Examination (Under-graduate Programmes)

Choice Based Credit System (CBCS)

❖ Revised Scheme of Examination

The performance of the learners shall be evaluated into two components. The learner's Performance shall be assessed by Internal Assessment with 40% marks in the first component by conducting the Semester End Examinations with 60% marks in the second component. The allocation of marks for the Internal Assessment and Semester End Examinations are as shown below:-

A) Internal Assessment: 40 %

40 Marks

| Sr. No. | Particular | Marks |
|---------|---|----------|
| 01 | One periodical class test / online examination to be conducted in the given semester | 20 Marks |
| 02 | Any two tools out of these (10 Marks each) 1. Group/ Individual Survey Project 2. Presentation and write up on the selected topics of the subjects 3. Case studies / Test based on tutorials 4. Book Review /Poetry Appreciation/ Open Book Test 5. Quiz | 20 Marks |

Question Paper Pattern

(Periodical Class Test/ online examination for the Courses at Under Graduate Programmes)

Maximum Marks: 20

Duration: 30 Minutes

| Particular | Marks |
|--|-------------|
| Match the Column / Fill in the Blanks / Multiple Choice Questions/ True/False/Answer in One or Two Lines (Concept based Questions) (1 Marks each) | 20 Marks |

B) Semester End Examination: 60 %**60 Marks**

- Duration: The examination shall be of 2 hours duration.

Question Paper Pattern**Theory question paper pattern**

1. There shall be five questions each of 12 marks (24 marks with internal options).
2. All questions shall be compulsory with internal options.
3. Question may be subdivided into sub-questions a, b, c... and the allocation of marks depends on the weightage of the unit.

➤ Passing Standard

The learners to pass a course shall have to obtain a minimum of 40% marks in aggregate for each course when the course consists of Internal Assessment and Semester End Examination. The learners shall obtain minimum of 40% marks (i.e. 16 out of 40) in the Internal Assessment and 40% marks in Semester End Examination (i.e. 24 out of 60) separately, to pass the course and minimum of Grade D, wherever applicable, to pass a particular semester. A learner will be said to have passed the course if the learner passes the Internal Assessment and Semester End Examination together.

Note:1) It is noted that the concerned regulation of the College is amended and implemented to all Semesters i.e. Semester I to Semester VI to all undergraduate programmes, under faculty of Arts, Commerce and Science with effect from the academic year 2022 - 2023.

2) This revised scheme of evaluation is discussed in detail, finalized and accepted.

B.O.S. DATE 12/03/2024

B.O.S. ITEM NO. 01

ACADEMIC COUNCIL DATE 13/06/2024

ACADEMIC COUNCIL ITEM NO. 04



Janardan Bhagat Shikshan Prasarak Sanstha's

CHANGU KANA THAKUR

Arts, Commerce and Science College, New Panvel

(Autonomous)

Re-accredited A+ Grade by NAAC (Third Cycle-CGPA-3.61)

'College with Potential for Excellence' Status Awarded by UGC

'Best College Award' by University of Mumbai

As per National Education Policy - 2020

Title of the Course

Foundation Course in NCC

Syllabus for

F. Y. BA/BCOM/BMS/BAF/B.Sc./Biotech/IT/CS

Two Credit Course

Semester III and IV

(With effect from the academic year 2024-25)



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR



Arts, Commerce and Science College, New Panvel (Autonomous)

As per National Education Policy - 2020

| Sr. No. | Heading | Particulars |
|---------|--------------------------------------|--------------------------------------|
| 1 | Title of Course | FC in NCC Studies |
| 2 | Eligibility | Cleared HSC examination. |
| 3 | Duration of course | 2 years for Subject Course |
| 4 | Intake Capacity | - |
| 5 | Scheme of Examination | Theory 30 Marks; Internal 20 Marks |
| 6 | Standards of Passing | 40% |
| 7 | Semesters | 02 |
| 8 | Course Academic Level | 5.5 |
| 9 | Pattern | Revised as per NEP 2020 |
| 10 | Status | Approved by BOS and Academic Council |
| 11 | To be implemented from Academic Year | Academic Year 2024-25 |

Lt. N. P. Tidar
Head of Department NCC
Changu Kana Thakur
A.C.S. College, New Panvel
(Autonomous)

Prof. (Dr.) S.K. Patil
Principal
Changu Kana Thakur
A.C.S. College, New Panvel
(Autonomous)



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR



Arts, Commerce and Science College, New Panvel (Autonomous)

Preamble: NCC Studies

The National Cadet Corps came into existence immediately after independence; the Kashmir war of 1948 was a bitter pill prompting the Govt. of India to reappoint the Kunjru Committee whose recommendations were instrumental in the inception of NCC on 16th of July 1948. The government of India accepted the recommendations of the committee and prepared a bill. This bill was passed by the parliament and made the national Cadet Corps Act, under this act NCC was opened in Schools and Colleges. To widen the scope of the NCC training, a Girl division in 1949, an Air wing in 1952, and Navy wing in 1952 were established. However, with voluntary enrolment recommenced in 1966, presently 1.35 million cadets are enrolled with the plans of raising the strength to 1.5 million, spread over 788 units fewer than 95 NCC groups led by ADG/DDG of the ranks of Major General/Brigadier equivalent in 17 Regional Directorates under the DNCC who is of the rank of Lieutenant General. National Cadet Corps acts as an interface for building a sense of patriotism, secular values, national unity, and social cohesion among the youth. 'NCC Studies' is an optional subject for F.C. where the syllabus apart from having social relevance in the Indian milieu has an emphasis on the overall development of the personality of cadets. Moreover, with the academic acknowledgement, the cadets will be better equipped to take up careers in civil services, defense, paramilitary, police and security forces further prompting increased demand by the students, augmenting recruitment standards of NCC. The students are thus provided with quality learning experiences through the meticulously planned curriculum with a perfect blend of theoretical knowledge & practical skills.

The 'NCC Studies' involves exposure to a range of subjects from Humanities to Science and Technology, apart from the Military Subjects taught both theoretically and practically. The theory and practical components of specialized subjects of Army, Navy, and Air Force, shall be imparted both in the classroom and on the field including the camps, ensuring 'Learnt be practiced'. The entire syllabus shall be covered by the concerned teachers and the Permanent Instructors (PI staff), deputed by the NCC. While the teacher is expected to give emphasis on the classroom teaching, the expertise of PI, shall be utilized for the instructional and practice sessions. The entire course shall be covered during the NCC parades which preferably be arranged during the working days, covering 30 periods per semester with a total of 60 periods per year. The program is divided into two semesters per academic year, with two credits per semester and four credits in an academic year. This program is categorized into three units per semester and a total of six units in an academic year. Institutional training, Camp training, Social Services and Community development, Adventure-based learning, Sports, Personality development, and Youth exchange programs are the various facets that shall form the components of this course. The pattern of evaluation will be in the form of continuous assessments and will comprise of internal and external assessment.

NOTE

The NCC 'B' and 'C' Certificate examinations are independent of the college examinations for being conducted by the NCC separately for the aspiring Cadets

Changu Kana Thakur Arts, Commerce and Science College, New Panvel (Autonomous)

1) Aims and Objectives

- **Improve the accuracy and precision of measurements.** This is important in a wide range of fields, from scientific research to industrial process control.
- **Increase the sensitivity of measurements.** This allows scientists to detect and quantify smaller amounts of analytes, which is important for fields such as drug discovery and environmental monitoring.
- **Improve the speed of measurements.** This is important for applications where real-time data is needed, such as in medical diagnostics and manufacturing.
- **Develop new measurement techniques that can be used to analyse complex systems.** This is important for fields such as materials science and biotechnology.
- **To make instrumentation more user-friendly and accessible.** This will allow a wider range of people to use advanced instrumentation, which will ultimately lead to a greater understanding of the world around us.

Learning Outcomes

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

- **Apply** their knowledge to study the analytes under investigation.
- **Communicate** their understanding of functioning of advanced instruments for biological purpose.
- **Critically evaluate** the importance of instrumentation in various biological studies.

3. Credit Structure of the F.Y. NCC Semester I and II

| No. of Courses | Semester III | Credits | No. of Courses | Semester IV | Credits |
|----------------------|--|-----------|----------------------|--|-----------|
| A | <i>Discipline Specific Course (Major)</i> | | A | <i>Discipline Specific Course (Major)</i> | |
| | | | | | |
| B | <i>Discipline Specific Course (Minor) (Select one, in continuation of Sem 2 minor)</i> | | B | <i>Discipline Specific Course (Minor) (Select one, in continuation of Sem 2 minor)</i> | |
| 3 | | | | | |
| C | <i>Open Elective (Any one from the OE List)</i> | | C | <i>Open Elective (Any one from the OE List)</i> | |
| 4 | | | | | |
| D | <i>Vocational Skill Courses</i> | | D | <i>Vocational Skill Courses</i> | |
| 5 | | | | | |
| E | <i>Skill Enhancement Course</i> | | E | <i>Skill Enhancement Course</i> | |
| | | | | | |
| F | <i>Ability Enhancement Courses</i> | | F | <i>Ability Enhancement Courses</i> | |
| 6 | | | | | |
| G | Foundation Course in NCC | | G | Foundation Course in NCC | |
| 1 | National Integration, Personality Development and Leadership | 02 | 1 | Adventure Training & Disaster Management | 02 |
| 2 | Benefits of NCC in Defence | | 2 | Health and Hygiene and First Aid | |
| 3 | Specialized subject (Army, Navy, and Air Force) | | 3 | Specialized Subject Army / Weapon Training | |
| | | | | | |
| H | OJT/FP/CEP/RP | | | OJT/FP/CEP/RP | |
| 8 | | | | | |
| Total Credits | | 02 | Total Credits | | 02 |

Abbreviations Used

- POs : Program Outcomes
- PS : Program Structure
- PSOs : Program Specific Outcomes
- COs : Course Outcomes
- TLP : Teaching-Learning Process
- AM : Assessment Method
- DSC : Discipline Specific Core
- DSE : Discipline Specific Elective
- GE : Generic Elective
- OE : Open Elective
- VSC : Vocational Skill Course
- SEC : Skill Enhancement Course
- IKS : Indian Knowledge System
- AEC : Ability Enhancement Course
- VEC : Value Education Course
- OJT : On Job Training (Internship)
- FP : Field project
- CEP : Community engagement and service
- **CC : Co-curricular Courses**
- RM : Research Methodology
- RP : Research Project
- MJ : Major Course
- MN : Minor Course



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR



Arts, Commerce and Science College, New Panvel (Autonomous)

Syllabus for F.Y. NCC Semester I
Choice Based Credit System
Under New Education Policy (NEP) 2020
(To be implemented from the academic year 2024-2025)

Course Structure

Course Code: UCC1NCC
Course Title: FC in NCC 1
Course Type: CC Two Credit Course

No. of Credits: 2

Course Outcomes (Cos)

| | | |
|---|---|-----------------------------------|
| Name of the Course: FC in NCC | Head of the Department: LT. NILIMA P. TIDAR | |
| Course Title: FC in NCC 1 | Course Code: UCC1NCC | |
| CO No. | COs Statement | |
| | After completing the course, students will be able to: | Bloom Taxonomy Level (BTL) |
| CO-1 | Emphasize a sense of patriotism, secular values and shall be transformed into motivated youth who will contribute towards nation building through national unity and social cohesion. | Apply |
| CO-2 | Understand the importance of the conservation of natural resources and protection of Environment. | Understanding |
| CO-3 | Develop the concept of patriotism, commitment and passion to serve the nation motivating the youth to join the defence forces. | Create |



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR



Arts, Commerce and Science College, New Panvel (Autonomous)

Course Code: UCC1CC

Course Title: FC in NCC 1

Unit I: National Integration, Personality Development and Leadership

Unit II: Benefits of NCC in Defence

Unit III: Specialized subject (Army, Navy, and Air Force)

| Unit. Subunit | Topic FC in NCC 1 | Lectures |
|------------------|---|----------|
| Unit 1 | Introduction to NCC, National Integration & Awareness | 10 |
| | A. Historical development of Military history in India (world war I & II, War after Independence) | 2 |
| | B. Genesis, Aims, Objectives of NCC & NCC Song | 2 |
| | C. Incentives & Benefits | 2 |
| | D. Present scenario of NCC and its advantages in career building | 1 |
| | E. NCC Camps | 1 |
| | F. Religions, Culture, Traditions and Customs of India | 1 |
| | G. National integration, necessity | 1 |
| Unit 2 | Environment Awareness - Conservation, Social Awareness and Community Development | 10 |
| | A. Natural Resources – Conservation and Management | 2 |
| | B. Water Conservation and Rainwater Harvesting | 2 |
| | C. Types of Pollution, Forest Ecology, and Waste Management | 2 |
| | D. Basics of Social Service, Weaker Sections of Our Society and Their Needs | 1 |
| | E. Social/ Rural Development Project: MNREGA, SGSY | 1 |

Changu Kana Thakur Arts, Commerce and Science College, New Panvel (Autonomous)

| | | |
|--------------------------|---|-----------|
| | F. Contribution of Youth towards Social Welfare | 1 |
| | G. Civic Responsibilities and Human rights | 1 |
| Unit. Subunit | Specialized Subject Army | 10 |
| 1 | A. Drill <ul style="list-style-type: none"> •General and Words of Command •Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt •Saluting at the Halt, Getting on Parade, Dismissing and Falling Out | 4 |
| | B. Communication <ul style="list-style-type: none"> •Types of Communications •Characteristics of Wireless Technologies (Mobile, Wi-Fi etc.) | 3 |
| | C. Armed Force <ul style="list-style-type: none"> •The basic organization of Armed Forces •Organization of Army •Badges and Ranks •Leadership and Biographies of War Heroes | 3 |



Janardan Bhagat Shikshan Prasarak Sanstha's
CHANGU KANA THAKUR



Arts, Commerce and Science College, New Panvel (Autonomous)

Syllabus for F.Y. NCC Semester II
Choice Based Credit System
Under New Education Policy (NEP) 2020
(To be implemented from the academic year 2024-2025)

Course Structure

Course Code: UCC2NCC
Course Title: FC in NCC 2
Course Type: CC Two Credit Course

No. of Credits: 2

Course Outcomes (Cos)

| | | |
|--------------------------------------|---|-----------------------------------|
| Name of the Course: FC in NCC | Head of the Department: LT. NILIMA P. TIDAR | |
| Course Title: FC in NCC 2 | Course Code: UCC2NCC | |
| CO No. | COs Statement | |
| | After completing the course, students will be able to: | Bloom Taxonomy Level (BTL) |
| CO-1 | Develop sense of adventure, sportsmanship and develop confidence, courage, determination, diligence and quest for excellence. | Create |
| CO-2 | Apply the knowledge of personal health and hygiene lead a healthy life style and foster habits of restraint and self-awareness. | Apply |
| CO-3 | Apply the knowledge of weapons and their use and handling. | Apply |



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Course Code: UCC2NCC

Course Title: FC in NCC 2

Unit I: Adventure Training & Disaster Management

Unit II: Health and Hygiene and First Aid

Unit III: Specialized Subject Army / Weapon Training

| Unit. Subunit | Topic FC in NCC 2 | Lectures |
|------------------|---|-----------|
| Unit 1 | Adventure Training & Disaster Management | 10 |
| | A. Obstacle course, Scuba diving, Trekking, Cycling, Rock Climbing. | 2 |
| | B. Civil Defense & NGO, NDMA: Its Duties | 2 |
| | C. Types of Disasters (Natural & Man-made Disaster) | 2 |
| | D. Types of essential services | 1 |
| | E. Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake/ Accident / pandemic etc. | 2 |
| | F. Responsibilities of NCC cadet for the development of our society | 1 |
| Unit 2 | Health and Hygiene and First Aid | 10 |
| | A. Hygiene and Sanitation (Personal and Food Hygiene) | 2 |
| | B. Infectious & Contagious Diseases & Their Prevention | 2 |
| | C. Common injuries and first aid | 2 |
| | D. Important of Yogic Kriya's | 2 |
| | E. (Cardio Pulmonary Resuscitation) CPR Demonstration | 2 |

Changu Kana Thakur Arts, Commerce and Science College, New Panvel (Autonomous)

| | | |
|---------------|---|-----------|
| Unit 3 | Specialized Subject Army | 10 |
| 1 | Weapon Training | |
| | A. Characteristics of a Rifle / Rifle Ammunition and its Fire Power | 1 |
| | F. Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle and 7.62mm rifle | 2 |
| | G. Map reading: Introduction to types of Maps and Conventional signs | 2 |
| | H. Field Craft and Battle Craft - Introduction | 2 |
| | I. Judging distance, Description of ground, Recognition | 1 |
| | J. Field Signals | 1 |
| | K. Battle drill, section battle drill, Field Defense and Ambush | 1 |

Reference Books

National Cadet Corps

| Title | Authors | Publication |
|---|----------------|---|
| Cadet's Hand book – Common subject All wings. | | BY DG NCC, New Delhi. |
| Cadet's Hand book – Specialized Subjects, Army, Navy, Air-force | | BY DG NCC, New Delhi |
| NCC OTA Precise | | BY DG NCC, New Delhi |
| “AVAN” Model of Disaster Mang. | Vinayak Dalvie | Proceedings of Int. Conf. on Urban Plan. and Env Strat & Challenges, Elphinstone College, Jan 2007. |

Additional Reading

| | | |
|--|---|---|
| Humanistic Tradition of India | N.L.Gupta | Mohit Publication, New Delhi |
| Social psychology | Baron & Byrne | Pearson Publication, 12th Edition self awareness know yourself / insight (110) Group & Individuals (374) Group discussion |
| Chanakya's 7 Secrets of Leadership | Radhakrishanan Pillai and D.Shivnandhan | Jaico |
| Social Psychology: Understanding Human Interaction | Baron, Robert A. | (302/BAR/BYR), 7th Edition |
| Seven Habits of Highly Effective People. | Covey, Stephen | |
| The Habit of Winning. | Iyer, Prakash | Penguin, India; 2011 |
| The Goal | Goldratt, Eliyahu | The Northriverpress; 1994 |
| Freedom Struggle | Chandra Bipin | National Book Trust 1972 |
| Freedom of Religion and The Indian Judiciary | BachalV.M., Shubhada Saraswat | (362P) |
| India 1996- A Reference Annual Govt. of India | | |
| SahaSoneri Pane | Vinayak D. Savarkar | |
| Environmental Biology and Toxicology | P.D. Sharma | Rastogi Publication |
| Environmental Science | S.C. Santra | New Central Book Agency |

| | | |
|---|--|--|
| National Cadet Corps (India) | Lambert M. Surhone, Mariam T. Tennoe, Susan F. Henssonow | Betascript Publishing, 2011 |
| National Cadet Corps, Youth in Action (Google eBook) | National Cadet Corps (India) | Lancer Publishers, 2003 |
| Youth in Step: History of the National Cadet Corps | V. Longer | Lancer international, 1983 Original from the University of Michigan |
| National Cadet Corps of India | Man Mohan Sharma | Vision Books, 1980 Original from the University of Michigan |
| The National Cadet Corps Act, 1948, as Modify Up to the 1st July 1963 | India | Government of India Press, 1963 (Military Law) |
| Cadet Corps in India: Its Evolution and Impact | Satis Chandra Maikap | Darbari Udyog, 1979 Original from the University of California |
| National Cadet Corps: 100 Years of Distinction | National Cadet Corps (Singapore) | NCC |
| The NCC | Singapore, National Cadet Corps Council | National Cadet Corps Council |
| Grooming Tomorrow's Leaders: National Cadet Corps, 1917-2006 | R.S. Chhettri | Lancer Publishers, 2006 |
| National Civil Defence Cadet Corps | Lambert M. Surhone, Mariam T. Tennoe, Susan F. Henssonow | Betascript Publishing, 2011 |
| Discovery of India | Jawaharlal Nehru | |
| Health and Hygiene | Manoj. J.S. | Agra University Publication |
| Yoga for Healing | Venkateswaran P.S. | Bombay:-Jaico Publishing House 1989 |
| Yoga Illustrated | New Delhi | Ministry of Information and Broadcasting, 1995 |
| Yoga Practice, 1972 | Shivnande Swami | Mumbai:- D.B. Taraporewala 1972 |
| Yoga of Patanjali-1979 | Yardi M.R. | Bhandarkar Oriental Research Institute- 1974 |
| Sustainable Development (An Alternative Paradigm) | Satpathy , N. | Karnavati Publications , Ahmedabad. |
| Global Partners for Sustainable Development | Pachauri R.K & Srivastava L. | Tata Energy Research Institute, New Delhi ; 1994, 1998 |
| Ecology and the Politics of survival : Conflict over Natural Resources in India | Shiva , Vandana | Sage Publications , California , 1991 |