



Janardan Bhagat Shikshan Prasarak Sanstha's  
**CHANGU KANA THAKUR**  
Arts Commerce and Science College, New Pancel  
(AUTONOMOUS)  
**SYLLABUS**

**For**

**First Year NCC SEM I and SEM II**  
**(W.e.f. 2019-20)**

**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	- I & II Semesters
v. Credit Structure	- 2 Credits per Semester
vi. No. of lectures per unit	- 60 lectures per Semester for 6 Units
vii. No. of lectures per week	- 3 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 16<sup>th</sup> 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, defence, 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 desicipline citizens of the nation
- To provide a suitable environment to motivate the youths to take up a Carreer 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 carrer in defence / paramilitary/ police forces & civil services

# Semester I

## Course – UG NCC 101

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

12

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

**Desired outcome:** The students will display 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
- ii. Present scenario of NCC and its advantages in career building
- iii. Genesis, Aims, Objectives of NCC & NCC Song
- iv. Organization & Training
- v. Incentives & Benefits
- vi. Religions, Culture, Traditions and Customs of India
- vii. National integration, necessity

### Unit 2: Drill: Foot Drill

8

**Objective:** To train students so as to achieve their physical, mental, psychological and emotional development.

**Desired outcome:** The students will demonstrate the sense of discipline, improve bearing, smartness, and turnout, and develop the quality of immediate and implicit obedience of orders, with good reflexes.

- i. General and Words of Command
- ii. Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt
- iii. Sizing, Forming Up in Three Ranks and Numbering, Open and Close Order March and Dressing
- iv. Saluting at the Halt, Getting On Parade, Dismissing and Falling Out
- v. Marching, Length of Pace and Time of Marching in Quick Time and Halt, Slow March and Halt
- vi. Turning on the March and Wheeling.
- vii. Saluting on the March.
- viii. Formation of squad and Squad Drill.

### **Unit 3: Environment Awareness and Conservation**

5

**Objective:** To make student aware of the protection and conservation of the environment.

**Desired outcome:** The student will be aware of the conservation of natural resources and protection of Environment.

- i. Natural Resources – Conservation and Management
- ii. Water Conservation and Rainwater Harvesting

### **Unit 4: Personality Development and Leadership**

8

**Objective:** To understand and develop life skills and soft skills and cultivate leadership qualities among the Youth.

**Desired outcome:** The student will develop an all-round personality with adequate leadership traits to deal / contribute effectively in life.

- i. Introduction to Personality Development
- ii. Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological
- iii. Self-Awareness Know yourself/ Insight
- iv. Change Your Mind Set
- v. Communication Skills: Group Discussion / Public Speaking
- vi. Leadership Traits
- vii. Types of Leadership

### **Unit 5: Specialized subject (ARMY)**

12

**Objective:** To impart basic military training, to develop awareness about the defence 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 defence forces.

It will also acquaint, expose & provide basic knowledge about armed, naval and air-force subjects

#### **A. Armed Force**

- i. Basic organisation of Armed Forces
- ii. Organisation of Army
- iii. Badges and Ranks

#### **B. Introduction to Infantry and weapons and equipments**

- i. Characteristics of 7.62mm SLR Rifle, Ammunition, Fire power, Stripping, Assembling and Cleaning

#### **C. Military history**

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- i. Biographies of renowned Generals (Carriapa / Sam Manekshaw)
- ii. Indian Army War Heroes- PVCs

#### **D. Communication**

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

**OR**

### **Unit 5: 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

#### **D. Swimming**

- i. Floating for three minutes and Free style swimming for 50 meters

**OR**

### **Unit 5: 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

#### **D. Aero- Engines**

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- i. Introduction to Aero-engines

## **Unit 6: Project**

15

**Objective: To make the students apply the knowledge in specialised military subject/ social topics/**

**Cultural endeavours.**

**Desired outcome:** The students shall have hands-on training field experience and opportunity to portray Cultural talent and develop personality.

## Semester II

### Course UG NCC 102

#### Unit 7A: Disaster Management

3

**Objective:** To empower and train youth to be responsible citizens and assist civil administration in performance of selective duties during disaster.

**Desired outcome:** The student shall gain basic information about civil defence organisation / NDMA & shall provide assistance to civil administration in various types of emergencies during natural / manmade disasters

- i. Civil Defence Organisation and Its Duties/ NDMA
- ii. Types of Emergencies/ Natural Disaster
- iii. Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake/ Accident etc.
- iv. 'Avan' model of NCC

#### Unit 7B: Social Awareness and Community Development:

4

**Objective:** To teach the values and skills involved in providing voluntary social service.

**Desired outcome:** The student shall have an understanding about social service and its need, about NGOs and shall participate in community action programmes for betterment of the community.

- i. Basics of Social Service, Weaker Sections of Our Society and Their Needs
- ii. Social/ Rural Development Project: MNREGA, SGSY, NSAP etc.
- iii. Contribution of Youth towards Social Welfare
- iv. Civic Responsibilities

#### Unit 8A: Adventure Training

8

**Objective :** To inculcate spirit of adventure, undertake adventure activities, to hone leadership qualities and risk taking abilities.

**Desired outcome :** The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , esprit-d-corp and develop confidence , courage , determination, diligence and quest for excellence.

- i. Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc

## **Unit 8B: Health and Hygiene**

**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

## **Unit 9: Drill with Arms**

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**Objective:** To train students so as to achieve their physical, mental, psychological and emotional development.

**Desired outcome:** The students will demonstrate the sense of discipline, improve bearing, smartness, and turnout, and develop the quality of immediate and implicit obedience of orders, with good reflexes.

- i. Attention, Stand at Ease and Stand Easy
- ii. Getting on Parade with Rifle and Dressing at the Order
- iii. Dismissing and Falling Out
- iv. Ground / Take Up Arms
- v. Present From the Order and Vice-versa
- vi. General Salute, Salami Shastra

## **Unit 10: Weapon Training**

**10**

**Objective:** To impart elementary knowledge about rifles and firing.

### **Desired**

**outcome:** The student shall have basic knowledge of weapons and their use and handling.

- i. Characteristics of a Rifle / Rifle Ammunition and its Fire Power
- ii. Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle
- iii. Stripping, Assembling, Care and Cleaning of 7.62mm SLR
- iv. Loading, Cocking and Unloading
- v. The lying position, Holding and Aiming- I
- vi. Trigger control and firing a shot
- vii. Range procedure and safety precautions
- viii. Short range firing, Aiming- II -Alteration of sight

## **Unit 11: Specialized subject (ARMY)**

**(12)**

**Objective :** To impart basic military training, to develop awareness about the defence 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 defence forces.

It will also acquaint, expose & provide basic knowledge about armed, naval and air-force subjects

**A. Map reading**

- i. Introduction to types of Maps and Conventional signs
- ii. Scales and Grid system
- iii. Topographical forms and technical terms
- iv. Relief, contours and Gradients
- v. Cardinal points and Types of North
- vi. Types of bearings and use of Service Protractor
- vii. Prismatic compass and its use and GPS

**B. Field Craft and Battle Craft**

- i. Introduction
- ii. Judging distance
- iii. Description of ground
- iv. Recognition, Description and Indication of landmarks and targets

**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 prosigns
- 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

**Unit 12: Project**

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**Objective: To make the students apply the knowledge in specialised military subject/ social topics/ cultural endeavours.**

**Desired outcome:** The students shall have hands-on training field experience and opportunity to portray cultural talent and develop personality.

### Distribution of periods

<u>Semester –I</u>		<u>Semester –II</u>	
<u>Unit</u>	<u>Periods</u>	<u>Unit</u>	<u>Periods</u>
1	12	7	07
2	08	8	08
3	05	9	08
4	8	10	10
5	12	11	12
6	15	12	15
<b>Total</b>	<b>60</b>	<b>Total</b>	<b>60</b>

## 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 <sup>th</sup> 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 <sup>th</sup> Edition
Seven Habits of Highly Effective People.	Covey , Stephen	
The Habit of Winning.	Iyer , Prakash	Penguin , India ; 2011
The Goal	Goldratt , Eliyahu	The Northriver press ; 1994
Freedom Struggle	Chandra Bipin	National Book Trust 1972
Freedom of Religion and The Indian Judiciary	Bachal V.M. , Shubhada Saraswat	(362P)
India 1996- A Reference Annual Govt. of India		
Saha Soneri 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 Modified Up to the 1 <sup>st</sup> 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



## **Scheme of Examination (B.A/B.Com/B.Sc)**

### **Internal Assessment 25 marks**

#### **Semester I**

	<b><u>Marks</u></b>
1. Attendance / Turn out/ Drill / Word of command / Adventure Training	05
2. <u>Project &amp; Presentation</u>	20
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	<b><u>25</u></b>

#### **Semester II**

	<b><u>Marks</u></b>
1. Attendance / Turn out/ Social Service activities	05
2. <u>Project &amp; Presentation</u>	20
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	<b><u>25</u></b>

# External Assessment 75 Marks

Question Paper Pattern

Semester I and II

Time: 2.5 Hrs

Total marks: 75

Note: 1.All questions are compulsory

2. All questions carry equal marks

Q.1 (A). Select the right answer (any five out of ten MCQs). (5)

(B). State whether the following sentence is true or false. (Any five out of ten) (5)

(C). Answer in one sentence (Any five out of ten questions) (5)

## Q 1

- **It is mandatory that all the units of the syllabus are reflected in the question paper**

- **Will consist of questions from units (1) to (4).**

- Q 2, 3 and 4 shall be with variations such as descriptive, long answers, short answers, short notes, diagrams, maps, multiple choices, match the column, and fill in the blanks, definitions etc with 100% internal option incorporated therein.

- **Will consist of questions from 1,2,3,4**

- Q 5 shall be exclusively based on unit (5) in Sem I and unit (11) in Sem II respectively, representing the specialization (Army/Navy/Air Force) with 100 % internal option therein

# Scheme of Examination for Speciality Courses

## Internal Assessment 40 marks

### Semester I

	<u>Marks</u>
i. Attendance / Turn out	10
ii. Drill / Word of command / Adventure Training	10
<u>iii. Project &amp; Presentation</u>	<u>20</u>
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	<b>40</b>

### Semester II

	<u>Marks</u>
i. Attendance / Turn out/ Drill with Arms / Word of Command / Weapon Training	10
ii. Socially useful & Productive Work	10
<u>iii. Project &amp; Presentation</u>	<u>20</u>
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	<b>40</b>

# **External Assessment 60 Marks**

## **Question Paper Pattern**

### **Semester I and II**

Time: 2 Hrs.

Total marks: 60

Note: 1.All questions are compulsory

2. All questions carry equal marks

Q1.(A). Select the right answer (any five out of ten MCQs). (5)

(B). State whether the following sentence is true or false. (Any five out of ten) (5)

(C). Answer in one sentence (any five out of ten questions) (5)

- It is mandatory that all the units of the syllabus are reflected in the question paper.
- Q 1. Will consist of questions from units (1) to (4).
- Q 2, and Q3 shall be with variations such as descriptive, long answers, short answers, short notes, diagrams, maps, multiple choice, match the column, fill in the blanks, definitions etc. with 100% internal option incorporated therein.
- Q 4 shall be exclusively based on unit (5) in SEM I and unit (11) in SEM II respectively, representing the specialization (Army/Navy/Air Force) with 100 % internal option therein.



