

UNIVERSITY OF MUMBAI

No. UG/ 06 of 2014

CIRCULAR:-

The Principals of the affiliated Colleges in Arts, Science and Commerce and the Heads of Recognized Institutions concerned are hereby informed that the recommendation made by the Faculty of Arts at its meeting held on 26th February, 2014, Faculty of Science at its meeting held on 25th February, 2014 & Faculty of Commerce at its meeting held on 28th February, 2014 have been accepted by the Academic Council at its meeting held 4th March, 2014 **vide** item No. 4.26 and subsequently approved by the Management Council at its meeting held on 4th April, 2014 **vide** item No.8 and that in accordance therewith, in exercise of the powers conferred upon the Management Council under Section 54 (1) of the Maharashtra Universities Act, 1994 and the Ordinances 6087, 6088, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096 and 6097 and the syllabus for NCC Studies (Under Inter-disciplinary Inter-faculty Innovative Programs-Courses) as per Choice Based Credit and Grading System for Sem. I and II of First Year of UG programs of Arts/Science/Commerce faculties are introduced, which is available on the University's web site (www.mu.ac.in) and that the same has been brought into force with effect from the academic year 2014-15.

MUMBAI – 400 032
23rd June, 2014

Sd/-
REGISTRAR

To,

The Principals of the affiliated Colleges in Arts, Science & Commerce and the Heads of Recognized Institutions concerned.

A.C/4.26/04.03.2014
M.C/8/04.04.2014

No. UG/06 -A of 2014

MUMBAI-400 032

23rd June, 2014

Copy forwarded with compliments for information to:-

- 1) The Deans, Faculties of Arts, Science & Commerce.
- 2) The Professor-cum-Director, Institute of Distance and Open Learning (IDOL),
- 3) The Director, Board of Colleges and University Development,
- 4) The Controller of Examinations,
- 5) The Co-Ordinator, University Computerization Centre.

Sd/-
Deputy Registrar
Under Graduate Studies

UNIVERSITY OF MUMBAI



**Syllabus for
First Year Programs of
Arts/ Science/Commerce Faculties
Course: NCC Studies
(Under Inter-disciplinary Inter-faculty
Innovative Programs-Courses)
w.e.f. 2014-15**

Semester I and II

**(As per Choice Based Credit and Grading System with facility
for Credit transfer)**

Syllabus Committee Members

Vinayak Dalvie – **Convenor**

Member Academic Council,
University of Mumbai

Col. VSN Vasista – **Member**

Commanding Officer
3 MAH BN NCC, Mumbai A

Cdr. R.Dutta – **Member**

Commanding Officer
DAS Naval Unit NCC, Mumbai B.

Wing Cdr. Yogesh Pai – **Member**

Commanding Officer
1 MAH Air Sqn. NCC, Mumbai B

Capt. D.V.Pawar – **Member**

Associate NCC Officer
1 MAH BN NCC

Kirti M. Doongursee College

Capt. Nilima S. Prabhu – **Member**

Associate NCC Officer
8 MAH Girl BN NCC
S.S & L.S. Patkar College

Special Invitees

Lt. Col. P.S. Bhinder – AD. Trng. Maharashtra Directorate

Lt. Col. Shivraj Patil – Trng. Officer, Group Mumbai A

Technical Assistance

CDT. Paradkar Yogesh S. – Kirti M. Doongursee College

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 | - | UG NCC 101 and UG NCC 102 |
| 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 |

1. Preamble

2. Pedagogy

3. Syllabus Semester I & II

4. References and Additional Reading

5. Scheme of Examination and Paper Pattern

6. Distribution of periods

7. Ordinances

8. Genesis and process

Preamble: NCC Studies

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. Chinese aggression in 1962 was an eye opener. The then Defence Minister Shri Krishna Menon resigned and the Architect of Modern Maharashtra Shri Yashwantrao Chavan was sworn in. Compulsion of NCC for youth was then felt inevitable, leading to an enrolment of 17.16 million youth. 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 under 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 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. However, we must accept that 'NCC Studies' is not yet a part of vocabulary of the main stream of Indian Higher Education. 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.

With the introduction of 10+2+3 pattern in education, Inter Arts/Sc/Com came to an end in the University in 1977-78. Foundation Course which was introduced to enhance general awareness of the students played a good buffer. 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. Above all the students will get an opportunity to select credits of their own choice thus making a humble beginning of the 'choice based credit system' in its true sense the facility of 'credit transfer'.

Educating people is not done by instant fiat. It requires time; and a variety of different processes of learning and teaching are involved into it vis-à-vis instruction, indoctrination, conditioning and learning by experience. Amongst many other ways the best suited approach is to provide for integrated studies by unifying various aspects ultimately resulting into wholeness for the essence of education. It is a subtle integration where no one aspect is stressed to the exclusion of another. The students are thus provided with quality learning experience through meticulously planned curriculum with a perfect blend of theoretical knowledge & practical skills. The University of Mumbai with this pioneering effort in the State is poised to full-fill the motto of NCC “Unity and Discipline”. Many of the advanced countries at some or the other point of time had military service mandatory for a recommended period. This democratic country with a wide diversity which is otherwise blessed with talents and resources can become a superpower only when each of the youth is an evolved personality who is a true patriot with national fervour and above all a good citizen with civic sense endorsing the need of NCC in the curriculum further.

- VINAYAK DALVIE

(Convenor, Syllabus Committee)

Pedagogy

The course is conceived and designed under innovative programmes/courses of the University and will be offered as an optional subject for Foundation Course at the undergraduate level with interdisciplinary-interfaculty approach.

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 specialised subjects of Army, Navy and Air force, shall be imparted both in the classroom and on the field including the camps, ensuring 'Learnt be practised'.

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 utilised for the instructional and practice sessions especially of Semester I – Unit 2, 3, 5 and Semester II – Units 9, 10 and 11. Guest lecturers of professionals from relevant fields / services are encouraged to expose students to the latest developments, trends and changes.

Units 6 and 12 comprise of the project work. The teachers shall have the flexibility of assigning the topics, keeping in view, the potential, talent, skills and interest of the individual student. A wide range of topics could be conceived ranging from specialised subjects, of Army/Navy/ Air force to conceptualising, choreographing, presenting/performing a cultural event encouraging cadets to portray their talents. Socially useful and productive work such as AIDs awareness, Pulse polio, Blood Donation Camps etc. could also be shaped as projects apart from the field work in environment conservation such as tree plantation, rain water harvesting etc. assigned. Care had to be taken however to ensure relevance in the given semester and the modality of being a group or an individual project as prescribed in the syllabus.

The entire course shall be covered during the NCC parades which may preferably be arranged during the working days avoiding Sundays covering 45 period 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 categorised 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 credits and grading shall be applicable as per the University norms. The Examinations shall be conducted by the college on behalf of the University where the student is enrolled in the NCC Unit. The examination/s of each semester shall be conducted by the concerned teacher/s and scheduled preferably during the regular parade days. However all other modalities for conducting the examination shall be governed by the University Ordinances/Rules followed as for any other subject and the same shall be monitored by the Principal/Dean/In-charge of Examination Committee as the case may be in the concerned College/Institute.

The pattern of evaluation will be in the form of continuous assessments and will comprise of internal and external assessment as per the University Ordinances/Rules/Regulations framed from time to time.

Question papers will be set generally based upon the question bank as and when prepared by the concerned committee though the same shall not be obligatory and the paper setters can set questions from outside the question bank.

On successful completion of the course UG NCC 101 in first semester and UG NCC 102 in second semester, the student will be awarded two credits per course and a total of four credits in the year which will be directly reflected in the mark sheet as per the University Ordinances/Rules/Regulations framed from time to time.

Though the student shall be expected to answer in the medium of instruction of the college / institution and the programme offered, on prior request, they may be allowed to answer in Marathi, if permitted by the University by issuing a circular to that effect and if granted by the concerned college.

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.

-Capt. (Mrs.) Nilima Prabhu.

Member- Syllabus Committee

AIMS

To reinforce the aims, motto, vision & mission of the NCC through the academic curriculum.

To instill and inculcate the core values of patriotism, commitment, just and impartial exercise of authority, effective contribution to community development and other social programs , healthy life style practices, habits of restraint & self-awareness & empathy to the needs of socially disadvantaged fellow citizens and above all enduring respect for knowledge, wisdom & power of ideas among the youth.

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

Semester I

Course – UG NCC 101

Unit 1: Introduction to NCC, National Integration & Awareness

9

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. Genesis, Aims, Objectives of NCC & NCC Song
- ii. Organisation & Training
- iii. Incentives & Benefits
- iv. Religions, Culture, Traditions and Customs of India
- v. National Integration: Importance and Necessity
- vi. Freedom Struggle

Unit 2Drill: 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, turnout, 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 3A: Adventure Training

4

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 3B: Environment Awareness and Conservation

2

Ojective : 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

10

Ojective : 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 / Lecurettes (Public Speaking)
- vi. Leadership Traits
- vii. Types of Leadership

Unit 5: Specialized subject (ARMY)

12

Ojective : 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

- 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

- 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.

On military subject, social aspect or cultural performance as may be deemed fit by the concerned teacher and as selected by a group of upto 10 students each.

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:

5

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
- v. Causes & Prevention of HIV/AIDS; Role of Youth

Unit 8: Health and Hygiene

5

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. Structure and Functioning of the Human Body
- ii. Hygiene and Sanitation (Personal and Food Hygiene)
- iii. Infectious & Contagious Diseases & Their Prevention

Unit 9: Drill with Arms

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, turnout, 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

12

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

- iv.

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

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.

On military subject, social aspect or cultural performance as may be deemed fit by the concerned teacher and as selected by each student to be executed individually.

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 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 st 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

Internal Assessment 40 marks

Semester I

	<u>Marks</u>
1. Attendance / Turn out	05
2. Drill / Word of command / Adventure Training	10
3. NCC Song / Personality Development & Leadership	10
4. <u>Project & Presentation</u>	15
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	40

Semester II

	<u>Marks</u>
1. Attendance / Turn out	05
2. Drill with Arms / Word of Command / Weapon Training	10
3. Socially useful & Productive Work	10
4. <u>Project & Presentation</u>	15
<hr/>	
	40

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

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)

- **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, 3 and 4 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.**
- **All the questions shall desirably be selected from the question bank (as and when prepared by the concerned committee). However the paper setter shall be free to use his discretion of setting questions from outside the question bank if deemed fit.**
- **Three sets of papers shall be submitted to the Principal/Dean/Director or the In-charge of the examination committee in sealed envelope on the date fixed for the purpose by the concerned College/Institute and that copies of a randomly selected Question Paper shall be made available on the day of the examination as per the rules of the University and as par the procedure followed by the concerned College/Institute for all other subjects.**

Distribution of periods

<u>Semester –I</u>		<u>Semester –II</u>	
<u>Unit</u>	<u>Periods</u>	<u>Unit</u>	<u>Periods</u>
1	09	7	08
2	08	8	05
3	06	9	08
4	10	10	12
5	12	11	12
6	15	12	15
Total.....	60	Total.....	60

Ordinances for ‘NCC Studies’

O. ___ Recognition of Colleges:

Only those colleges/Institutes affiliated to the University of Mumbai, having operational NCC Unit granted by the Directorate of NCC, Maharashtra shall be eligible to apply for introducing ‘NCC Studies’ as a subject and can continue the said subject with the approval of the competent authorities of the University and/or the Government of Maharashtra till such period as they enjoy the privilege of having NCC unit operational, granted by the Directorate of NCC Maharashtra in the said College/Institute. Needless to say that the permission of the said College/Institute to conduct NCC Studies as a subject shall cease if the NCC Unit is closed down, thereby preventing fresh enrolment.

O. ___ Infrastructure:

The college concerned shall arrange the necessary infrastructural facilities such as class room/s, parade ground, obstacle course, DP Rifles and their maintenance, training equipments, stores and consumables, ledgers and documents etc., of which the immovable items shall be provided by the college while the rest arranged/procured from the NCC Authorities, especially the technical utilities required for the effective administration and conduct of the course of ‘NCC Studies’.

O. ___ Qualifications of Teachers:

The course shall necessarily be taught by ANO/s (Associate NCC Officer/s) of the units who is/are approved Degree College teacher/s, failing which by CTO/s (Care Taker Officer/s) of the unit/s who is/are approved Degree College teacher/s holding NCC ‘C’ certificate, failing which by ANO/s of the units who is/are approved Junior College teacher/s, failing which by CTO/s who is/ are approved junior college teacher/s holding NCC ‘C’ certificate, failing which by Degree College approved teacher/s who is/ are retired ANO/s, failing which by Junior College approved teacher/s who is/are retired ANO/s, failing which by those who hold NCC ‘C’ certificate and is/ are approved Degree college teacher/s, failing which by those who hold NCC ‘C’ Certificate and is/are approved Junior College Teacher/s, failing which a visiting faculty complying any of the qualifications prescribed, here-in-above.

O. ___ Conduct of the Course:

The Course shall be completed by the concerned teacher by conducting/ arranging Lectures, Demonstrations, Camps, Training, Practice Sessions and Guest Lectures during the days and time of regular parades and camps. In addition the PI (Permanent Instructors) staff deputed by NCC shall conduct specialised topics, demonstrations, training and practice sessions as specified in the syllabus from time to time. The parades, however shall be preferably conducted on the working days.

O. ___ Remission in Work-load / Remuneration:

There shall be remission of two periods of work-load per week to the concerned teacher/s for the sanctioned strength of every unit granted by the NCC Directorate Maharashtra, subject to the approval of the Government, failing which remuneration shall be paid by the college at prevailing rates to the concerned teacher/s for the periods engaged, with prior sanction obtained from the concerned Principal/Dean/Director. Further, the remuneration for paper setting, assessment and other duties of the examination, if any, shall be as per the norms prescribed by the University from time to time. The College / Institute shall also arrange for the payment of honorarium for the guest lecturers as per the provisions and practice in the College/Institute with prior sanction of the Principal/Dean/Director.

O. ___ Eligibility, Enrolment and Strength:

The bonafide students of this University offering programme in the faculty of Arts / Science / Commerce are eligible to opt for NCC Studies as a subject in place of foundation course in semester I, II, III and IV, subject to the desired physical fitness and selection in the concerned NCC Unit and that the strength of such enrolment shall not exceed the strength allotted by the Directorate of NCC Maharashtra to the said Unit.

O. ___ Change of subject from NCC Studies to Foundation Course:

Students opting for NCC Studies in the I semester shall be allowed to change and opt for foundation course in the beginning of the II and/or III and/or IV semester if he does not continue to be a cadet enrolled in NCC per se or is unable to continue the course of NCC Studies for valid reason. The same may also be allowed during the I semester or even in the middle of any of the semesters, if the relevant ordinances/rules of the University for enrolment and/or attendance and/or granting of terms etc permit so, at the material time.

O. ___ Extension in NCC for 1 year:

A student completing 3 years of SD/SW NCC in the First year of his degree college i.e, in the II semester of any program can opt for 'NCC studies' in III and IV semesters only if extension of one year is granted to the said cadet by the NCC authorities permitting him to enrol in NCC Unit during his III and IV semester since enrolment in NCC is a prerequisite for opting/continuing NCC studies as a subject.

O. ___ Enrolment in Open Unit (Attached to College/Institute)/NCC Unit in other College/Institute:

In case of a student joining NCC Unit attached to a college/Institute other than the college/Institute where he is a bonafide student, the said student can opt for NCC studies as a subject only if the Principal/Dean/Director of the College/Institute where he is a bonafide student permits him to do so while seeking NOC (in proforma prescribed by the University) from the Principal/Dean/Director of the College/Institute where he is enrolled as an NCC cadet. The Principal/Dean/Director of the College/Institute having the said NCC Unit shall communicate the attendance and other relevant details to the College/Institute where the said cadet is a bonafide student for the purpose of granting terms to such student/s as per the ordinances/rules of the University.

O. ___ Fees:

Fees for NCC Studies shall be the same as that of the foundation course and as prescribed by the University and permitted by the Government, if needed, for the said College/Institute from time to time.

If the student joins NCC in some other College/Institute and offers 'NCC Studies' as an optional subject for the Foundation Course, then the said fees shall be as prescribed for the Foundation Course in the College/Institute where the concerned student joins NCC and pursues 'NCC Studies' and in such case shall pay the proportionate tuition and examination fees to that college.

O. ___ Evaluation:

The pattern of credits and grading shall be as applicable for the Foundation Course. The Examinations shall be conducted by the college on behalf of the University, if applicable, where the student is enrolled in the NCC Unit by the concerned teacher/s and scheduled preferably during the regular parade days and timings by the competent authority such as the Principal/Dean/Director or the In-charge of the examinations of the College/Institute while monitoring the process from setting of question papers (3 sets) to assessment in the CAP along with the other subjects. The marks/credit points/grades of the students joining the said NCC unit and opting 'NCC studies' as the subject who are otherwise bonafide students of some other College/Institute shall be communicated by the Principal/Dean/Director of the College/Institute where the NCC unit exists to the Principal/Dean/Director of the College/Institute where the said student is a bonafide student otherwise.

(NOTE: The NCC 'B' and 'C' certificate examinations are independent of the college examinations for being conducted by the NCC authorities separately for the aspiring cadets. Further notwithstanding anything stated for the introduction of 'NCC studies' as an optional subject for the Foundation Course the benefit of ordinance O.229 continues without prejudice to all the NCC cadets fulfilling the requirements as envisaged therein).

GENESIS AND PROCESS

DATES	EVENT / SESSION	OUTCOME	VENUE
6 th Mar'2011	Workshop on Credit Based Grading System – Zoology. The thought of awarding credits to NCC cadets was put forth to Shri Vinayak Dalvie Chairman BOS by Capt. Nilima Prabhu.	The thought was accepted in principle to be presented to the authorities	Patkar College, Goregaon (West), Mumbai
April'2011	Group Commander's Conference Mumbai A- "Presentation on Institutional training -Review & Recommendations" by Capt. Nilima Prabhu.	The proposal for probable allocation of Credits to NCC Cadets appreciated & taken up with higher authorities	Group Head Quarters, Fort, Mumbai.
Aug'2013	Meeting of ANOs of 8 Mah Girls BN. to recommend implementation of NCC as an elective subject	Recommendation of ANOs put forth to Group Commander Mumbai A by AO Lt. Rashmi Chaudhary	8, Mah Girls BN NCC, Haji Ali
07 th Oct'2013	Conference organised by Group Commander-Mumbai A Brig J N Nayar to study NCC syllabi, launched by different Universities.	The results of deliberations were noted by group Commander-Mumbai A	Group HQ NCC, Fort, Mumbai
17 th Oct 2013	Initiation & submission of proposal by Shri Vinayak Dalvie Member, Academic Council, to the Dean Faculty of Arts, Dr. Pralhad Jogdand, for consideration of NCC as an innovative course	Proposal considered under Innovative Programmes under Board of Studies in Physical Education by the chairman Dr.Pargaonkar.	University of Mumbai, Fort Campus
18 th Oct'2013	Letter from Dr Rajpal Hande Director BCUD University of Mumbai to ANOs	Formation of coordinating committee.	University of Mumbai, Fort Campus
19 th Oct'2013	First meeting of the committee, Vinayak Dalvie (Convenor), Capt. Pawar, Capt. Thorat, Capt. Nilima Prabhu	Exploring possibilities to include NCC Under Innovative Programme as an elective / optional subject to Foundation Course	University of Mumbai, Fort Campus
20 th Oct'2013	Meeting of VC Dr. Rajan Welukar & the Deans	Proposal of Vinayak Dalvie for considering NCC under innovative programs/courses was accepted.	University of Mumbai, Kalina Campus

21 st Oct 2013	University issued circular inviting applications for innovative programs/courses	Appointment of ADG was sought since the last date was 30 th Oct 2013	
21 st Oct 2013	Proposal of BCUD Director Dr. Rajpal Hande to NCC, Mah Directorate was co-ordinated with Director Capt (IN) R Ayyar by Capt (Dr) D V Pawar, (Member University co-ordinating Committee)	Permission for subject to be titled as “NCC Studies” was granted by the NCC Directorate	NCC Directorate -Mah, Marine Lines, Mumbai
24 th Oct’2013	Meeting of ADG, NCC, Mah Directorate Maj Gen S Sengupta, VSM , NCC officers with Shri Vinayak Dalvie & Capt.Nilima Prabhu	Immediate action by ADG directing all the groups to contact ANOs for a workshop on 26 th Oct’2013.	Directorate -Mah, Marine Lines, Mumbai
26 th Oct’2013	Workshop for explaining modalities to apply to Mumbai University for NCC as an optional subject, for ANOs.	Brig. Nayar, Group Commd. D’souza & Vinayak Dalvie under the chairmanship of Dr.Hande explained procedures to be followed for application by 30 th Oct’2013.	Group HQ, Fort, Mumbai
05 th Nov’2013	Designation of ‘NCC Studies’ Syllabus Working Committee Vinayak Dalvie (Convenor), Capt. D.V.Pawar, Capt. Nilima Prabhu.	Preparation of Draft Syllabus started	University of Mumbai, Fort Campus
20 th Nov’2013	1 st meeting of NCC Studies Syllabus working committee.	Formulation of preliminary draft of 1 st year syllabus of NCC studies	Kirti College, Dadar, Mumbai
30 th Nov’2013	One day Workshop organised by Capt H P Thorat for review of new syllabus of NCC studies as optional to Foundation Course under CBSGS for ANOs of District Colleges of Mumbai University, belonging to NCC Kolhapur Group.	Recommendations, suggestions noted and FAQs were answered by the working committee	I C S College, Khed, Dist : Ratnagiri
10 th Dec’2013	Workshop on preliminary NCC syllabus conducted by working committee for ANOs of 14 colleges, who applied for the subject under Innovative Programmes launched by the University of Mumbai	Critical evaluation of preliminary draft. Listing FAQ’s	Dr. B. Ambedkar Bhavan University of Mumbai, Kalina, Santa Cruz, Mumbai
24 th Dec’2013	2 nd Meeting of Working Committee & Dr V.N. Magare, Princ, KirtiCollege :	Marking scheme finalised and Question paper Pattern drafted.	Kirti College, Dadar,

			Mumbai
30 th Dec'2013	3 rd Meeting of Working Committee	Review & allocation of lectures, practice sessions	Kirti College, Dadar, Mumbai
14 th Jan'2014	4 th Meeting of Working Committee	Answers to FAQ's finalised leading to base of ordinances	Kirti College, Dadar, Mumbai
16 th Jan'2014	5 th Meeting of Working Committee	Formulation of ordinances	Mithibai College, Vile-Parle, Mumbai
17 th Jan'2014	Presentation of syllabi to Faculty of Science, University of Mumbai by Shri Vinayak Dalvie, Convenor Working Committee.	accepted by Faculty of Science	University of Mumbai, Fort
21 st Jan'2014	Seminar for presentation of 1 st draft of syllabus and ordinances to ADG Maj. Gen. S. Sengupta, VSM, Capt. Iyyer, Brig. Nayar, Group Commd. D'souza & NCC Officers.	Suggestions of ADG & NCC officers wrt distribution of internal marks, conduct of parade on week day's inclusion of specialised subjects were accepted.	ADG, MAH Directorate
5 th Feb'2014	6 th Meeting of Working Committee & Dr Vishnu Magare, Princ, Kirti College.	List of reference books and additional reading was prepared	Mithibai College
11 th February, 2014	Draft Syllabus Emailed to all stake holders	Suggestions received	Kirti College
11 th Feb'2014 & 17 th Feb'2014	7 th & 8 th Meeting of Working Committee	modifications of 1 st draft of Syllabus incorporated recommendations ADG Maj. Gen. S. Sengupta, VSM	Kirti College
18 th Feb'2014	9 th Meeting of Working Committee	Preamble and Pedagogy prepared	Mithibai College
		Finalisation of Draft	Mithibai College
18 th Feb' 2014	Draft Syllabus Emailed to all stake holders	Suggestions not received	Kirti College

20 th Feb'2014	Meeting of Syllabus Committee	Final draft prepared.	University of Mumbai, Fort
20 th Feb' 2014	Draft Syllabus Emailed to all stake holders	Suggestions not received	Kirti College
21 st Feb'2014	Presentation of Syllabus to Board of Studies, Physical Education.	Approval of BOS in physical education with some suggestions	University of Mumbai, Fort
23 rd Feb'2014	Incorporating suggestions given by Board of Studies in Physical Education	Document Improved	Kirti College
24 th Feb' 2014	Corrections Done	Forwarded to University	Mithibai College
24 th Feb 2014	Draft Syllabus Emailed to all stake holders	Suggestions not received	Kirti College
26 th Feb' 2014	Presentation of Syllabus by Convenor – NCC Syllabus Committee to Faculty of Arts.	Approval of faculty of Arts expected	University of Mumbai, Fort
28 st Feb' 2014	Presentation of Syllabus by Convenor – NCC Syllabus Committee to Faculty of Commerce.	Approval of faculty of Commerce expected	University of Mumbai, Fort
4 th March' 2014	Presentation of Syllabus by Convenor – NCC Syllabus Committee to Academic Council, Mumbai University.	Approval of academic council expected	University of Mumbai, Fort

Capt. (Dr) D. V. Pawar
ANO- 1, Mah NCC BN
Kirti College, Dadar (West)
Mumbai

NOTES :