

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's
New Arts, Commerce and Science College, Ahmednagar
(Autonomous)

(Affiliated to Savitribai Phule Pune University, Pune)

Department of Physical Education



**(Syllabus and Guidelines for First Year U. G.
Students of All the Faculties)**

Implemented from

Academic year 2021 -22

Dr. S. B. Magar
Chairman
Board of Studies in Statistics

Dr. B.H. Zaware
Principal
New Arts, Commerce and Science College

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's
New Arts, Commerce and Science College, Ahmednagar
(Autonomous)

Board of Studies in Physical Education

Sr. No.	Name	Designation
1	Dr. S.B. Magar	Chairman
2	Mr. D.S. Haral	Member
3	Dr. A.M. Rohakale	Member
4	Dr. P.A. Shelake	Member

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First Year U.G. (For all faculties)
Structure

First Year U. G. Students Physical Education
(For All faculties)

Implemented from

Academic Year 2021 -22

**First Year U.G. Students Physical Education and Sports
(For all Faculties)**

Semester – II

Course Type	Course Code	Course Title	Credits
Additional Credit	-	Physical Education	02

AIM OF THE COURSE:

The aim of the course is to make Physical Education as an integral part of educational system and Promote physical activity among sedentary students / non-sportsmen. Students studying in the colleges should have the benefit of physical education to improve their health during the course of college education. It is designed to ensure that on completion of this course, they would attain the minimum prescribed standard.

OBJECTIVE OF THE COURSE:

The objective of the course is to enhance physical efficiency and maintain fitness of mind, and body, which would help the student to be mentally alert and physically efficient to withstand the strain and fatigue of daily life. It would prepare them for the strenuous training which will help them to be fit to face the different barriers in life. The students will undergo this course for the first year of his/her under graduate course education.

COURSE OUTCOMES :

- Explain the concept and importance of health related Physical Fitness, Nutrition and Physical Activities
- Understanding and applying knowledge of Physical Fitness and health related nutrients components for healthy life style.
- Define and explaining the History, Skills, Ground Measurements, Rule and Regulations. Of the selected sports.
- Demonstrating and developing own physical fitness components through health related physical activities.

Semester –II	Paper –I
Course Code: -	Title of the Course: Physical Education
Credits: 02	Total Hours: 30

Detailed Syllabus:

Unit 1: Introduction to Physical Education

- Concept of Physical Education, its Definition and Scope.
- Concept of Physical Fitness
- Components of Health Related Physical Fitness (Cardio-vascular Endurance, Muscular Strength Endurance, Flexibility, and Body Composition) and Activities to improve these components.
- Components of Skill related Physical Fitness (Speed, Agility, Power, Balance, Co-ordination & Reaction time.) and activities to improve these components.
- Physical Activity Guidelines (Physical activity for health benefits)
- Concept of Health, Health Education, Determinants of Health
- Nutrition – Balanced Diet

Unit 2: Participation in Games and Sports

- A student will have to select one game / sport from the list of Association of Indian Universities, New Delhi (List of events available on website www.aiuweb.org). The choice of game / sports will be according to the facilities available in the college. The following points to be covered:
 - History of the Game/sport
 - Ground measurements
 - Skills of the game/sport
 - Basic rules of the game/sport
 - Every student should participate in game/sport selected by him/her for 15hrs

Unit 3: Intramural Organisation

- In order to create opportunity for mass participation student should participate in organisation of one game / sport from the list of Association of Indian Universities, New Delhi (List of events available on website www.aiuweb.org). The choice of game / sports will be according to the facilities available in the college.

Unit 4 : Fitness Assessment

- In order to improve the physical fitness standards of students, they should be given opportunity and facilities to participate in a game / sport from the list of Association of Indian Universities, New Delhi (List of events available on website www.aiuweb.org). The choice of game / sports will be according to the facilities available in the college.
- Fitness Assessment
 - Cardiovascular Endurance
 - Flexibility
 - Muscular Strength Endurance and
 - Body Composition (No marks)

REFERENCE BOOKS:

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- Singh, D. K. (2010). Principle and History of Physical Education and Sports. Sports Publication, New Delhi.
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**First Year U. G. Students Physical Education &
Sports (For All Faculties)**

Evaluation Structure

Implemented from

Academic year 2021 -22

EVALUATION STRUCTURE

Table 1

Semester	Course	Credit	Marks	Mode of Evaluation
II	PHYSICAL EDUCATION	1	25	Project and Practical (15hrs. of participation) in selected game / sport).
		1	25	Practical–Fitness Test (Table 2)

indicate first credit

indicate second credit

- To complete second credit of Course Physical Education, student has to participate in selected game / sport for **minimum 15 hours** and will have to prepare a handwritten project work on the sports event selected for that year in his/her language selected for studies. **The project** to be prepared will be based on the following contents:
 - History of the Game
 - Ground measurements
 - Skills of the game
 - Basic rules of the game
- Procedure for fitness tests are given in the guidelines section which also includes Norms Table. Marks to be awarded in accordance with the norms table.

Fitness Test:

Table 2

Sr. No.	Component	Test	Marks
1	Cardiovascular Endurance (Any One)	1. Modified Queens College Test or 1. 12 Min. Run Walk	10
2	Flexibility	2. Sit and Reach Test	05
3	Muscular Strength Endurance	3. Push Ups / Modified Push Ups	10
4	Body Composition	4. Fat Percentage	--
Total :			25

In the second semester the students will have to appear for the Fitness Test (25 marks). Test wise weightage of marks is as per Table 2. The examination will be conducted as per the convenience of the college generally in between January to March of each academic year.

CRITERIA OF PASSING

Table 3

Semester	Course	Credit	Max. Marks	Minimum Passing %	Max. Marks	Minimum Passing %
II	PHYSICAL EDUCATION	1	25	40%	25	40%
		1	25	40%	25	40%

- To pass a student shall have to get minimum 40% in each credit and aggregate 40% in course.
- Student who have failed/who have been absent for the entire course/who have not completed any task will have to complete the entire course during the 3rd/ 4th

- semester whichever is applicable.
- Student will not be considered eligible for 5th semester without completing the Courses (i.e. Course - PHYSICAL EDUCATION).

CONSIDERATIONS AND EXEMPTIONS:

Differently Able Students

Differently able students will be exempted from the course PHYSICAL EDUCATION after producing the valid documents. This is not depriving them from the equality of opportunity with other students. The student shall have to submit his/her medical certificate at the time of admission from a Civil Surgeon of respective District Civil Hospital.

IMPORTANT NOTE:

- Temporary illness will not give students exemption from the course. If he / she miss any assessment / task he / she will be given opportunity in the ensuing semester.

Exemption

Any Student representing college / institute in the enlisted games of Association of Indian Universities / Indian Olympic Association / State Olympic Association shall be **exempted from mandatory participation in selected game / sport for minimum 15 hours** of second credit of Course Physical Education.

GRADING:

Grading for course as follows.

Table 4

Range of Marks	Grade	Grade Points
45-50	O	10
38-44	A+	09
30-37	A	08
28-30	B+	07
25-27	B	06
23-24	C	05
20-22	P	04
Below20	F	00
Absent	Ab	00
	Ex	Exempted

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PHYSICAL EDUCATION AND SPORTS

PHYSICAL EDUCATION

FITNESS TEST MANUAL

**(Syllabus and Guidelines for First Year U.G.
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Implemented from

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TEST DESCRIPTION

1. MODIFIED QUEENS COLLEGE STEP TEST :

OBJECTIVE :

To provide a practical, convenient means for assessing cardio respiratory fitness.

VALIDITY :

using maximal oxygen consumption as the criterion, a correlation of - .75 was obtained between the first heart rate recovery score (5-20 seconds after exercise) and max. VO₂ expressed in ml/kg/min

RELIABILITY :

A reliability coefficient of .92 was reported

EQUIPMENT AND MATERIALS :

Bleachers serve as stepping bench (16.25 inches). A metronome is used for the cadence.

Women 22 steps per minute and Men 24 steps per minute.

PROCEDURE :

Half of the class may be tested at one time with the other half serving as partners to count pulse. Following the explanations of the test and pulse-counting procedures, the counters are allowed several practices in counting their partners pulse rates for 15- seconds intervals.

The test consists of stepping up and down on the bleachers step for 3 minutes. At the end of the time period, the subjects remain standing while the partners count pulse rate for 15 seconds interval beginning 5 seconds after the cessation of exercise. The counters and steppers then exchange places and the other half of the class is tested.

SCORING :

The 15- seconds pulse count is multiplied by 4 to express the score in beats per minute.

NORMS :

Men (Performance in Beats per minute)	Women (Performance in Beats per minute)	Marks out of 10
≤ 119	≤ 115	10
120 – 127	116 – 123	9
128 – 135	124 – 131	8
136 – 143	132 – 139	7
144 – 151	140 – 147	6
152 – 159	148 – 155	5
160 – 167	156 – 163	4
168 – 175	164 – 171	3
176 – 183	172 – 179	2
≥ 184	≥ 180	1



2. TWELVE MINUTE RUN AND WALK TEST (COOPER'S TEST):

OBJECTIVE :To measure cardio-respiratory endurance.

VALIDITY :Validity is 0.90 when correlated with treadmill measurements of oxygen consumption and aerobic capacity.

RELIABILITY :Reliability is 0.94 with test-retest method.

EQUIPMENT AND MATERIALS :Stopwatch or clock with sweep second hand, whistle or starter's pistol, track, football field, or some running area marked so that distance travelled in 12 minutes can be calculated easily.

PROCEDURE : Performers assemble behind starting line. At the starting signal, they run or walk as far as possible within the 12 minute time limit. An experienced pacer should accompany performers around the running area during the actual test. Performers should have experienced some practice in pacing. At the signal to stop, performers should remain where they finished long enough for test administrators to record the distance covered. Ample time should be given for stretching and warm-up as well as post-test cool down.

SCORING : Score is distance in meter covered in 12 minutes.

NORMS :

Men(In meters)	Women (In meters)	Marks out of 10
≥2450	≥2000	10
2335 – 2449	1940 – 1999	9
2250 – 2334	1900 – 1939	8
2190 – 2249	1840 – 1899	7
2080 – 2189	1750 – 1839	6
2000 – 2079	1640 – 1749	5
1850 – 1999	1530 – 1639	4
1740 – 1849	1440 – 1529	3
1500 – 1739	1300 – 1439	2
≤ 1499	≤ 1299	1

3. SIT AND REACH :

OBJECTIVE :To measure the hip and back flexion as well as extension of the hamstring muscles of the legs.

VALIDITY :Face validity was accepted for this test.

RELIABILITY :An 'r' of 0.94 was found when the best score of three trials was recorded from separate testing and correlated.

EQUIPMENT AND MATERIAL :Flexomeasure case with yard stick and tape.

PROCEDURE :

- i. Line up the 15 inch mark of the yardstick with a line on the floor and tape the ends of the stick to the floor so that the flexomeasure case (window side) is face down.
- ii. Sit down and line up your heels with the near edge of the 15 inch mark and slide your seat back beyond the zero end of the yardstick.
- iii. Have a partner stand and brace his or her toes against your heels. Also, have an assistant on each side to hold your knees in a locked position as you prepare to stretch.

- iv. With heels not more than 5 inches apart, slowly stretch forward, while pushing the flexomeasure case as far down the stick as possible with the fingertips of both hands. Take your reading at the near edge of the flexomeasure case.

SCORING : The best of three trials measured in centimeter is your test score.

NORMS :

Men (in cms)	Women (in cms)	Marks out of 5
≥ 45.97	≥45.72	5
41.40 – 45.96	41.15 – 45.71	4
37.95 – 41.39	37.59 – 41.14	3
32.51 – 37.94	32.00 – 37.58	2
≤ 32.50	≤ 31.99	1

4. BENT KNEE SIT UPS :

OBJECTIVE : To measure the dynamic (isotonic) endurance of abdominal muscles.

EQUIPMENT AND MATERIALS : A stopwatch and a mat or dry turf or clean floor.

PROCEDURE :

The subject is asked to lie on the back with knees bent, feet on the floor with heels not more than 12 inches from the buttocks. The angle of the knees should not be less than 90degree. The subject is asked to put his or her hand on the back of the neck with finger clasped and to place the elbows squarely on the mat or turf or floor. The subject's feet are held by a companion to ascertain that the feet do not leave the surface and remain touching it. Then the subject is asked to tighten the abdominal muscles and to bring the head and elbows to the knees. The entire above process constitutes one sit up.

The subject is asked to return to starting position with his/her elbows on the surface before sitting up again. The tester gives the above demonstration to all the subjects to be tested before the actual performance of the test. The timer gives the starting signals ready, go ! at the word 'go' the timer starts the stopwatch and the subject starts the sit ups performance as quickly as possible with /her best efforts. The tester starts counting the number of sit ups performed. After 60 seconds, the timer gives the signal stop and the subject stops, while the tester records the number of correctly executed sit ups performed by the subject in 60 seconds. This gives the score of the test.

Only one trail is given unless the tester believes that the subject has not had a fair opportunity to perform. A subject is not allowed any rest in between sit ups during his performance. No incorrect sit ups is counted in which the subject does either of the following mistakes:

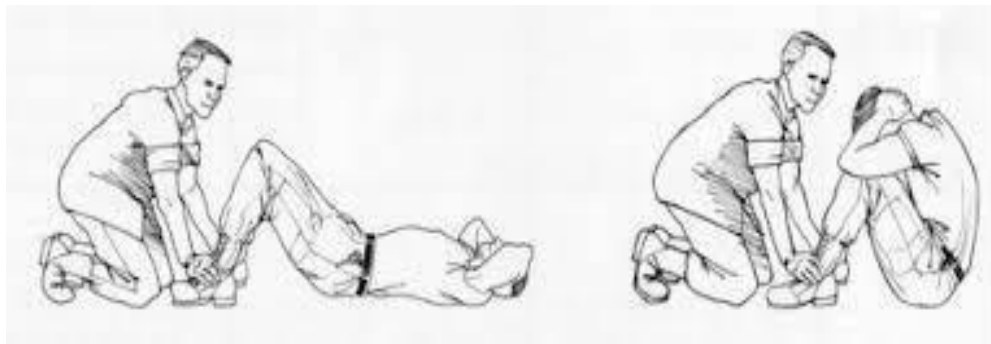
- a) Keeps the fingers unclasped behind the neck.
- b) Returns to the incomplete starting position with elbows not flat on the surface before starting the next sit up.
- c) Brings both elbows forward by pushing of the floor with any elbow.

SCORING :

Number of correctly executed sit ups performed by the subject in 60 seconds

NORMS :

PERFORMANCE (NUMBER OF SIT UPS) Men	PERFORMANCE (NUMBER OF SIT UPS) Women	Marks out of 10
≥ 38	≥ 27	10
35 – 37	25 – 26	9
33 – 34	23 – 24	8
31 – 32	21 – 22	7
29 – 30	19 – 20	6
27 – 28	17 – 18	5
25 – 26	15 – 16	4
23 – 24	13 – 14	3
19 – 22	10 – 12	2
≤ 18	≤ 9	1



PERCENTAGE BODY FAT :

Bioelectrical Impedance (BI) :

Bio electrical is gaining popularity because of its ease in administration and its similarity to skin fold measurements regarding accuracy. BI is based on the relationship between total body water and lean body mass. Since water is an excellent conductor of electricity, a greater resistance to an electrical current passing through the body indicates a higher percentage of body fat. Likewise decrease when there is higher percentage of lean tissue. Since BI is sensitive to changes in body water, subject should refrain from drinking or eating within 4 hours of the measurement, void completely before the measurement, and refrain from consuming any alcohol caffeine, or diuretic agent before assessment. Failure to do so increases measurement error. For this Omron Body Fat Monitor can be used.

Thank You