

**SAVITRIBAI PHULE PUNE UNIVERSITY
(SPPU)
(Formerly University of Pune)**



CREDIT SYSTEM (CS)
For
SEMESTER PATTERN
Post Graduate Programs

Handbook

(Updated Version)

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MESSAGE FROM HON. VICE CHANCELLOR, SPPU

*The world of today is full of competition in each and every field. In order to cop-up with the needs of the time it has become necessary to prepare ourselves in tune with the norms and practices accepted and implemented across the globe. As such, one of the important aspects is to add a value to a postgraduate degree by imparting a knowledge based and hands-on experience training to the students. This very aspect demands the choice based credit system for the PG programs. The Credit System (CS) not only nurtures a student to put his best efforts for touching the heights of excellent education based knowledge but also allows carrying the credits earned from one University to the other in India and abroad as well. In fact, there are as many aspects that are of great importance in the CS but **CONTINUOUS ASSESSMENT** is the backbone and so it has to be handled with care so as to visualize a student with potential for excellence. Our University has jumped into this well of 21st century education with a firm footing of CS from the academic year 2013-14 for the PG programs conducted at affiliated colleges also. I am confident that the teachers involved in the implementation part would shoulder the responsibility & add values to it.*

This handbook of CS is prepared to facilitate the aims and objectives of the system and the teachers as well as students would testimony the lucidity and essence of it.

Dr. W. N. Gade

PREAMBLE

In pursuance of the decision to implement Credit System at the Post Graduate level and ensure continuous assessment, the SPPU has decided to incorporate the Credit System (CS) under Semester Pattern in all its affiliated colleges and recognized institutions where postgraduate programs are conducted.

The Hon. Vice-Chancellor and the authorities of University of Pune, namely, the members of the Management Council, the

Deans of Faculties, the Members of the Academic Council, and the chairmen of the board of studies are the pillars in shaping the system for the cause of the benefit to the students.

Of course, all the teachers are committed to handle the credit system for the better and result oriented output in the enhancement of knowledge level of each and every student.

Down the line of every 2/3 years, the University is keen to inculcate the system and observe the overall development of its students.

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1. General administration

1.1 These rules and regulations shall be applicable for the conduct of CS for the Departments on the Campus of SPPU (implemented in AY 2001-02) as well as for the affiliated colleges and institutes (implemented in AY 2013-14).

1.2 As per the UGC directives, 10 point scale is applicable from the academic year AY 2015-16 (not applicable to the students admitted before the AY 2015-16).

1.3 CS Coordination Committee.

1. *Director, BCUD – Chairman*
2. *Deans of faculties - Members*
3. *HODs from Campus(02) - Members*
4. *Professors from Campus(02) - Members*

This Committee shall take all decisions arising pertain to these rules and the implementation of CS.

2. Conduct of the Credit System

2.1 The Post-Graduate Degree will be awarded to those students who earn the minimum number of credits as follows:

Name of the Faculty	Total credits	Average credits per semester
<i>Science, Engineering, Pharmacy, Management, Technology</i>	100	25
<i>Arts & Fine Arts, Social Sciences, Commerce, Law, Education*, Physical Education*</i>	64	16

(* - will be as per the directives of Education Council)

- In a case, where the PG program duration is of one year, such a program shall consist of minimum 40 credits.
- Except the credits for practical courses, wherever applicable, a student can register for less number of courses in a semester subject to the condition that such a student will have to complete the degree in a maximum of four (five) years for 2 years (3 years) program. This facility will be available subject to the availability of concerned courses in a given semester and with a maximum variation of 25 % credits (in case of fresh credits) per semester.

2.2 The proportion of Laboratory courses shall be around 40 % of the total credits of a PG program. Project work, if included, shall consist of NOT more than 10 % of the total number credits for PG programs in Science, Engineering, Technology, Management, Pharmacy and 05 % of the total number of credits for other PG programs.

2.3 One credit will be equivalent to 15 clock hours of teacher-student classroom contact in a semester. There will be no mid-way change allowed from Credit System to Non-credit (external) System or vice versa.

2.4 A post graduate teacher in a subject shall be affiliated to only ONE post graduate center at any given time and for only one subject.

2.5 For the routine conduct of the CS in a PG Department on the campus of SPPU, HoD will be the Chairperson and the teachers (employees of SPPU) in the Department will be the members.

While for a PG Department in colleges/institutes, Dean of the concerned faculty shall be the Chairperson and the constitution of faculty wise committee shall be as follows:

1. *Dean of the Faculty – Chairman*
2. *Two HoD's of the Post Graduate centers from the respective faculty nominated by the Hon. Vice Chancellor*
3. *One HoD/Professor/Subject expert from the Post Graduate Department of the University Campus nominated by the Hon. Vice Chancellor*
4. *Director, BCUD - Coordinator*

2.6 Among the minimum number of credits to be earned by a student to complete a Post Graduate Degree program (100/64 credits), the student will have to earn minimum 75% credits from the parent Department (subject) and the remaining up to 25 % credits could be earned from the parent Department (subject) or any subject/s of any faculty conducted at other PG Department/ PG Center. In any case, a student will have to earn compulsory credits from the parent Department (subject) over and above.

3. Examination Rules

3.1 Assessment shall consist of CA-Continuous assessment and ESE(ETE)-End of Semester(Term) Examination with an equal weightage of 50%.

3.2 The concerned teacher is responsible for conduct and evaluation towards CA and shall announce at the beginning of the course about the mechanisms under which CA would take place. However, the ESE (ETE) shall cover the entire syllabus prescribed for that course.

3.3 The CA towards 50% marks will be a continuous activity and at least two written tests (for 60-80% marks out of CA marks) must be conducted in addition to at least two following mechanisms (for 20-40% marks out of CA marks) for a full course of 4/5 credits.

Journal/Lecture/Library notes, Short Quizzes, Seminar presentation, Assignments, Extension Work, An Open Book Test (book to be decided by the concerned teacher), Mini Research Project by an individual student or a group of students

A teacher may devise a mechanism other than written test in addition to above in order to flourish the course contents.

a) It is mandatory for a teacher to hand over the assessed answer sheets to the respective students well before the commencement of the ESE (ETE).

b) It is also mandatory to declare the score gained by all the students in a course towards CA on the notice board duly signed by the concerned teacher of the course and the HoD/Principal/Director.

- 3.4 ESE (ETE) for the remaining 50% marks will be conducted by SPPU.
- 3.5 A student has to obtain 40 % marks taken together of CA and ESE (ETE) with a minimum of 30% in each of these separately.
- 3.6 A student will have to obtain a minimum aggregate of 40% marks in each course to be counted for the minimum number of credits required for the completion of the program.
- 3.7 If a student misses an internal assessment examination he/she will have a second chance with the endorsement of the HoD/Principal/Director in consultation with the concerned teacher. Such a second chance shall not be the right of the student.
- 3.8 a) If a student is declared as “PASS” in a course (Grade other than F), then the student cannot choose/reappear that course unless appearing under “CLASS/GRADE IMPROVEMENT” for ESE (ETE) only.
- CA is not available for a course in which the student has been declared as “PASS”.
- b) If a student is declared as “FAIL” (Grade F) in a course, then the student is allowed to choose such a course, with CA and ESE (ETE) both, only in a semester in which the course is conducted, irrespective of the previous score in CA.

Otherwise, the student may appear only for ESE (ETE) in that course in any of the following/forthcoming semester, provided that the student has scored at least 15% of the total 100% (or 30% of the 50% of the total marks) in CA.

Explanation:

X = 100%

CA score	ESE/ ETE Score	CA+ ESE/ETE	Result
≥15% of X	≥15% of X	≥40% of X	PASS/Earned Credits with Grade
≥15% of X	≥15% of X	<40% of X	FAIL/No Credits Earned

Y = Course,

Odd-Sem = First Half/Semester of an Academic Year

Even-Sem = Second Half/Semester of an Academic Year

Semester in which Y is conducted	Status of the Y for a student	Future scope for improvement in Y
Odd-Sem	PASS	Under CLASS IMPROVEMENT only
	FAIL	The student can appear for ESE (ETE) in any subsequent semester, provided the student has scored ≥ 15% of X. OR The student can choose/register Y with CA and ESE (ETE) both in an Odd-Sem.
Even-Sem	PASS	Under CLASS IMPROVEMENT only
	FAIL	The student can appear for ESE (ETE) in any subsequent semester, provided the student has scored ≥ 15% of X. OR The student can choose/register Y with CA and ESE (ETE) both in an Even-Sem.

c) In case of 3.8(b), the maximum duration available to register/reappear for a course will be as follows.

2 years PG Program – Up to 4 (four) years
(i.e. if a student is registered/admitted for first semester in 2013-14, then the student is allowed to register/reappear up to second semester in 2016-17)

3 years PG Program – Up to 5 (five) years
(i.e. if a student is registered/admitted for first semester in 2013-14, then the student is allowed to register/reappear up to second semester in 2017-18)

d) In the case of 3.8(b), the number of attempts (excluding registered for first time) available to register/reappear for the course would be 3(three) only, subject to 3.8(c).

e) In an exceptional case, if there are sufficient number of students who wish to register for a course for CA and ESE (ETE) both in which they are failed, then such a course can be conducted in the immediate following semester only, in addition to the courses conducted in that semester. However, there cannot be more than two such courses at a time in that semester.

3.9 The student will be finally declared as failed if the minimum numbers of credits are not earned within a total period of Four and Five years respectively for 2 years PG Program and 3 years PG Program. After that, such a student will have

to seek fresh admission as per the admission rules prevailing at that time.

- 3.10 A student cannot register for the third/fourth semester, if she/he fails to complete 50% credits of the total credits expected to be ordinarily completed within two semesters.
- 3.11 There shall be a revaluation of the answer scripts of ESE (ETE) as per Ordinance No.134 A & B, but not of CA.
- 3.12 While marks will be given for all examinations, they will be converted into grades. The Semester End Grade sheets will be generated by using marks and grades and the final grade sheets and transcripts shall have grade points average and total percentage of marks (up to two decimal points). The final grade sheet will also indicate the PG Department/Center to which the candidate is registered.

4. Assessment and Grade Point Average

- 4.1 The system of evaluation will be as follows: Each CA and ESE (ETE) will be evaluated in terms of marks. The marks for CA and ESE (ETE) will be added to convert into a grade and later a grade point average. There is no grade independently for CA or ESE (ETE).
- 4.2 Result of a student will be declared for each semester after the ESE (ETE) only.
- 4.3 The student will get a Grade Sheet with total grades earned and a Grade Point Average, after earning the minimum number of credits towards the completion of a PG program (subject to 3.9).

4.4 Marks/Grade/Grade Point w.e.f. AY 2015-16 (10 Point Scale):

Marks	Grade	Grade Point
80-100	O: Outstanding	10
70-79	A+: Excellent	9
60-69	A: Very Good	8
55-59	B+: Good	7
50-54	B: Above Average	6
45-49	C: Average	5
40-44	P: Pass	4
0-39	F: Fail	0
-	Ab: Absent	0

Following will be applicable for all those who are admitted before the AY 2015-16 till they complete the PG program (subject to 3.9).

Marks	Grade	Grade Point
100 to 75	O: Outstanding	06
74 to 65	A: Very Good	05
64 to 55	B: Good	04
54 to 50	C: Average	03
49 to 45	D: Satisfactory	02
44 to 40	E: Pass	01
39 to 0	F: Fail	00

4.5 Final Grade w.e.f. the AY 2015-16 (10 Point Scale):

Grade Point Average	Grade
09.00 – 10.00	O
08.50 – 08.99	A+
07.50 – 08.49	A
06.50 – 07.49	B+
05.50 – 06.49	B
04.25 – 05.49	C
04.00 – 04.24	P
00.00 – 03.99	F

Remark: B+ is equivalent to 55% marks and B is equivalent to 50% marks.

Following will be applicable for all those who are admitted before the AY 2015-16 till they complete the PG program (subject to 3.9).

Grade Point Average	Grade
05.00-6.00	O
04.50-04.99	A
03.50-04.49	B
02.50-03.49	C
01.50-02.49	D
00.50-01.49	E
00.00-00.49	F

4.7 'B' Grade is equivalent to atleast 55% of the marks as per circular No.UGC- 1298/[4619]UNI-4. (Not applicable for 10 point scale)

4.8 A seven point grade system [guided by the Government of Maharashtra Resolution No. NGV-1298/[4619]/UNI.4 and the University regulations] will be followed uniformly for Science, Arts, Mental, Moral and Social Sciences. The corresponding grade table is detailed above.(not applicable for 10 point scale)

4.9 If the GPA is higher than the indicated upper limit in the three decimal digit, then higher final

grade will be awarded (e.g. a student getting GPA of 4.492 may be awarded 'A' grade). (Not applicable for 10 point scale)

- 4.10 There will be only final compilation and moderation at GPA (Final) level done at the Department. While declaring the result, the existing relevant ordinances are applicable. There is also a provision for verification and revaluation, subject to the applicable rules at that point of time.
- 4.11 For grade improvement, 2 year program student will have to reappear for ESE (ETE) only in the courses comprising a minimum of 30 credits in case of Science, Engineering, Technology, Management and Pharmacy; 20 credits for other faculties and 12 credits in case of one year degree program. These courses will be from the parent Department only in which the student has earned the credits. A student can opt for the Grade Improvement Program only after the declaration of earning minimum number of credits and completion of the PG Program (subject to 3.9) within the period of two years from the completion of program.
- 4.12 The formula for GPA will be based on Weighted Average. The final GPA will not be printed unless a student passes courses for the minimum 100 credits, 80 credits or 64 credits as the case may be.

4.13 The description for the grades is as follows:

O: Outstanding: Excellent analysis of the topic, (80% and above)

Accurate knowledge of the primary material, wide range of reading, logical development of ideas, originality in approaching the subject, Neat and systematic organization of content, elegant and lucid style;

A+ : Excellent : Excellent analysis of the topic (70 to 79%) Accurate knowledge of the primary material, acquaintance with seminal publications, logical development of ideas, Neat and systematic organization of content, effective and clear expression;

A: Very Good: Good analysis and treatment of the topic (60 to 69%) Almost accurate knowledge of the primary material, acquaintance with seminal publications, logical development of ideas, Fair and systematic organization of content, effective and clear expression;

B+: Good: Good analysis and treatment of the topic (55 to 59%)

Basic knowledge of the primary material, logical development of ideas, Neat and systematic organization of content, effective and clear expression;

B: Above Average: Some important points covered (50 to 54%)

Basic knowledge of the primary material, logical development of ideas, Neat and systematic organization of content, good language or expression;

C: Average: Some points discussed (45 to 49%)

Basic knowledge of the primary material, some organization, acceptable language or expression;

P: Pass: Any two of the above (40 to 44%)

F: Fail: None of the above (0 to 39%)

4.14 One credit is equivalent to 20-25 marks for evaluation purpose.

4.15 There will be an evaluation of each course by students at the end of every semester. (Sample format enclosed for course evaluation by students)

Relevant circulars from which these rules are compiled and modified

- 187/2001 (12-7-2001) for both M. A. and M. Sc.
- 168/2002 (14-6-2002) & CBH/5422 of 29-8-2002 in continuation of 168/2002 for Social sciences and Humanities
- 125/2004 (22-3-2004) addition to 168 of 2002
- 296/ 2006 (5-8-2006) for all departments
- UGC D.O. No. F. 1-1/2014(Secy) Dated 12th Nov. 2014

5. *Modus Operandi of Evaluation under Credit System-2 years programs*

- 5.1 Each regular student will normally appear for all the 25% credits in a semester out of the minimum number of credits required to obtain a degree.
- 5.2 A student who wishes to register to the third /fourth semester should have gained at least 50% credits out of the total number of credits offered at the first and second semester of the first year.
- 5.3 Evaluation of each credit will be in two parts, namely CA and ESE (ETE).
- 5.4 A course may be of 1 or 2 or 3 or 4 or 5 credits.
- 5.5 The evaluation of a course means the evaluation of total number of credits of that course. As such, all the credits taken together of a particular course will be evaluated in two parts CA and ESE (ETE).
- 5.6 Weightage for CA would be 50% and for ESE (ETE) would be 50%.
- 5.7 A course will be evaluated in the form of 50 marks for CA and 50 marks for ESE (ETE).
- 5.8 A student will gain all the credits of a course after having obtained minimum 40 marks from CA (minimum 15 out of 50) and ESE (ETE) (minimum 15 out of 50) taken together and will get the

respective grade and grade points in the respective course. Otherwise, a student will get grade F (Fail) in that respective course and will not gain any credits or grade points towards that course.

5.9 CA: The teacher would evaluate a student towards a course through interaction throughout the semester which would include one or more (but not less than 4 including compulsory written test/s) of the following mechanisms with their maximum weightage out of 50 marks and this essentially enables the teacher to get positive feedback about a student's overall understanding/ability and in nutshell enhances the teaching-learning process.

- a. Written test – Max 2 with not more than 15 marks for each
- b. Assignment – Max 2 with not more than 5 marks for each
- c. Seminar presentation – 5 marks (not for all the students)
- d. Group discussion – 5 marks (not for all the students)
- e. Extension work – 5 marks (not for all the students)
- f. An open book test – 10 marks (to be conducted in a classroom for not more than 3 questions)
- g. Report/Note on research paper/s or study tours – 5 marks (not for all the students and to be presented in the respective class)

- A teacher may propose any other mean towards CA (other than written test) that may suit for a particular course and implement only after the approval of the Departmental Committee constituted and approved by the HoD/Principal/Director.

5.10 If a student could not attend the CA written test due to some unavoidable reasons then the teacher may consider a request for retest in writing with furnishing the reason of absence.

5.11 If a student failed to gain the credits of any course (declared F grade in that course) then the student can reattempt the course with CA (if the course is conducted in that semester) and ESE (ETE) both or with ESE (ETE) only (if one has scored 15 in CA) in the subsequent ESEs (ETEs) (max. two such attempts) within a period of 4 years (5 for 3 years programs) from the date of admission for the first semester (subject to 3.9).

5.12 In case a student failed to earn the minimum number of credits required for obtaining a degree within the stipulated period of 4 years (5 years for 3 years programs) then such a student will be declared **INCOMPLETE EXIT** and in such a case the student can seek a fresh admission as per the admission rules prevailing at that time.

5.13 The policies and procedures determined by the SPPU from time to time will be followed for the

conduct of examinations and declaration of the result of a candidate.

5.14 ESE (ETE): Each credit will be evaluated for a maximum period of 45 minutes. The following would be an outline for setting the question paper for ESE(ETE).

Credits	Duration	Questions to be attempted	Number of Subquestions	Marks for subquestions
1	45 min	1 out of 2	3 (for 2 questions)	4+3+3 or 5+3+2 or 4+4+2
2	90 min	3 out of 5	3 (for 3 questions)	4+3+3 or 5+3+2 or 4+4+2
			2 (for 2 questions)	5+5
3	150 min	4 out of 6	2 (for 4 questions)	4+3+3 or 5+3+2 or 4+4+2
			2 (for 2 questions)	5+5
4/5	180 min	5 out of 8	3 (for 6 questions)	4+3+3 or 5+3+2 or 4+4+2
			2 (for 2 questions)	5+5

Note: A question paper for PG program course of 3/4/5 credits under any Faculty other than Science, Engineering, Technology, Management and Pharmacy may contain a question of 10 marks(1 out of 2) without a subquestion.

5.15 PRACTICAL EXAMINATION:

- a. The duration for the conduct of ESE (ETE) of a practical course would be same as stipulated in 5.13.
- b. The outline of the distribution of maximum marks for various aspects/mechanisms towards CA is as follows:
 - *Journal – 10 marks*
 - *Viva-voce at the time of submission of each practical – 20 marks*
 - *Group discussion of 5/6 students for testing the understanding level of a student – 10 marks*
 - *Attendance – 5 marks*
 - *Additional practical work of interdisciplinary approach – 5 marks*
- c. At least three experiments should be asked for the full course of 4/5 credits and at least two for 2/3 credits.
- d. Certified Journal would be compulsory to appear for the ESE (ETE) practical course.
- e. There shall be two experts from the parent Department and two examiners (one of which will be external) per batch.

5.16 If a student failed to obtain a grade other than F in a course then such a course will not be taken into account for calculating GPA and overall grade. In fact, all the courses in which a student has passed will be taken into account for calculating the GPA and overall grade.

6 Modus Operandi of Evaluation under Credit System-3 years programs

MCA/MSc(IMCA)/3-year Programs:

- 6.0** All the points other than 5.1 and 5.2 above are applicable to these programs also.
- 6.1** Each regular student will normally appear for all the 25 credits in a semester. (For the program of 150 credits in Six semesters)
- 6.2** A student who wishes to register to the third semester/fourth semester should have gained at least 25 credits. (In case 50 credits offered per year)
- 6.3** A student will be considered to have “Completed” the Internship/Industrial Training upon the submission of certificate of completion, duly signed and sealed, from the Organization where the candidate worked during the Internship period. In case a student failed to submit the required certificate of completion duly signed by mentor/Organization then the student will be considered to have “Not Completed” the required internship/industrial training at the time of the declaration of the result. And hence such student will have to undergo the complete training.




Savitribai Phule Pune University


RULES AND REGULATIONS

for

UG Choice Based Credit System Programme Under Faculty of Science

Effective from June 2019


Prof. S. D. Dhole
Chairman
UG/PG Rule & Regulation committee,
SPPU, Pune


Prof. A. D. Shaligram
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1. Background/Preamble:

Education plays enormously significant role in building of a nation. There are quite a large number of educational institutions, engaged in imparting education in our country. Majority of them have entered recently into semester system to match with international educational pattern. However, our present education system is churning out youth who have to compete locally, regionally, nationally as well as globally. The present alarming situation necessitates transformation and/or redesigning of system, not only by introducing innovations but developing learner-centric approach.

Majority of Indian higher education institutions have been following the system which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests can choose inter-disciplinary, intra-disciplinary and skill-based courses. This can only be possible when choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also explore additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate benchmarking of our courses with best international academic practices.

1.1 Preface

In a bid to fine tune our scientific education system to the global standards & practices, the Credit-Grade based performance and assessment system will be implemented with effect from June 2019 onwards for all the Under Graduate Programmes (UG) under the Faculty of Science, Savitribai Phule Pune University, Pune, starting with First Year.

With the advent of frontier science, technology and ever-changing expectations from the Industry and Society, it has become imperative to relook at the structure and subject contents of various UG courses to make it contemporary and relevant.

As per the decision by the authorities of Savitribai Phule Pune University, the faculty of Science has prepared the choice based credit system and its structure. The revised course is of 132 credits and 1 credit is equivalent to 15 hours. Assessments in credit system consist of A) In-semester continuous assessment and B) End-semester assessment for the Theory head and Term Work/ Practical / Oral / Presentation at the end of the semester for Practical, Oral, Seminar and Project Head.

The faculty of Science has shouldered the idea of incorporating latest advances in Science and technology and equip the subject/syllabus contents with latest and relevant topics and know-hows. Accordingly the new structure and syllabi are being introduced, to be implemented from the academic year 2019-20 from First Year and it will continue for subsequent years.

1. All UG programmes, under Faculty of Science shall be offered with credit system.
2. All the B.Sc. programmes running under the Faculty of Science will be of three years duration.
3. The total no. of credits required for the completion of the programme is 132 credits.
4. One credit is equivalent to 15 hours.
5. A student is required to earn 132 credits in a minimum period of six semesters.
6. There are eight mandatory credits to be earned by the students for the award of degree.
7. Final CGPA will be calculated on the basis of 132 credits.
8. There is 15 weeks of teacher-student interaction during the semester.
9. The 15 week is divided into 12 weeks teaching and 3 weeks for continuous assessment including preparation time to students during the semester.

10. The workload will be calculated on the basis of 12 weeks teaching only.

1.2 Advantages of the choice based credit system:

1. Shift in focus from the teacher-centric to student-centric education.
2. Student may undertake as many credits as they can cope with (without repeating all courses in a given semester if they fail in one/more courses).
3. CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and aptitude) and more flexibility for students.
4. CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, Physics with Economics, Microbiology with Chemistry or Environment Science etc.
5. CBCS offers flexibility for students to study at different times and at different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred to another institution.

1.3 Implementation of UG course structure:

1. For First year: Student has to select 4 different subject among the subjects offered by the College /Institute.
2. For Second year: Student has to select 3 different subject among 4 subject chosen in first year
3. For Third year: Student has to select only 1 subject among the 3 subject opted in second year
4. CGPA will be calculated on the basis of core 132 credits only
5. Each theory credit is equivalent to 15 clock hours of teaching and each practical credit is equivalent to 30 clock hours of teaching in a semester.
6. There is 15 weeks of teacher-student interaction during the semester.
7. The 15 week is divided into 12 weeks teaching and 3 weeks for continuous assessment including preparation time to students during the semester.
8. The workload will be calculated on the basis of 12 weeks teaching only.
9. For the purpose of computation of work-load the following mechanism may be adopted as per UGC guidelines:
 - i) 1 Credit = 1 Theory period of one hour fifteen minute duration per week
 - ii) 1 Credit = 1 Tutorial period of one hour fifteen minute duration per week
 - iii) 1 Credit = 1 Practical period of two hour ten minute duration per week
10. Each theory Lecture time for FY, SY, TY is of 50 min. (3 Lectures per week for 2 credit course)
11. Each practical session time for FY is of 3 hour 15 minutes = 195 min
12. Each practical session time for SY & TY is of 4 hour 20 minutes = 260 min
13. Exam pattern: University assessment 70 % and continuous internal assessment 30 %.
14. For Internal examination minimum two tests per paper of which one has to be written test of 10 marks.
15. Methods of assessment for Internal exams: Seminars, Viva-voce, Projects, Surveys, Field visits, Tutorials, Assignment, Group Discussion.



2. UG Programme Structure:

2.1 Each B.Sc. programme is of 3 years duration. The minimum total no. of credits requirement for each programme is 132. In the structure, the credits are distributed over 6 semesters. The open elective included, gives the student a wide choice of subjects from other programmes. The Credit structure for B.Sc. programme is given below in Table 1.

Table 1
Savitribai Phule Pune University
Faculty of Science and Technology
Structure of Choice Based Credit System for Undergraduate Science Programme

	Discipline Specific Core Courses (CC)		Ability Enhancement Compulsory Courses (AECC)		Discipline specific Elective Courses (DSEC)		Skill Enhancement Courses (SEC)		
Sem ester	Course	Theory 1 + Theory 2 + Practical Credit	Course	Theory + Practical Credit	Course	Theory 1 + Theory 2 + Practical Credit	Course	Theory + Practical Credit	Total Credit
I	CC - I	2 + 2 + 1.5 = 5.5	-	-	-	-	-	-	22
	CC - II	2 + 2 + 1.5 = 5.5							
	CC - III	2 + 2 + 1.5 = 5.5							
	CC - IV	2 + 2 + 1.5 = 5.5							
II	CC - V	2 + 2 + 1.5 = 5.5	-	-	-	-	-	-	22
	CC - VI	2 + 2 + 1.5 = 5.5							
	CC - VII	2 + 2 + 1.5 = 5.5							
	CC - VIII	2 + 2 + 1.5 = 5.5							
III	CC - IX	2 + 2 + 2 = 6	AECC - I (Environment)	2 + 0 = 2	-	-	-	-	22
	CC - X	2 + 2 + 2 = 6	AECC - II (Language communication)	2 + 0 = 2					
	CC - XI	2 + 2 + 2 = 6							

IV	CC - XII	2 + 2 + 2 = 6	AECC - III (Environ ment)	2 + 0 = 2					
	CC - XIII	2 + 2 + 2 = 6	AECC - IV (Langua ge commun ication)	2 + 0 = 2	-	-	-	-	
	CC - XIV	2 + 2 + 2 = 6							22
V	-	-	-	-	DSEC - I	2 + 2 + 2 = 6	SEC - I	2 + 0 = 2	
	-	-	-	-	DSEC - II	2 + 2 + 2 = 6	SEC - II	2 + 0 = 2	
	-	-	-	-	DSEC - III	2 + 2 + 2 = 6	-	-	22
VI	-	-	-	-	DSEC - IV	2 + 2 + 2 = 6	SEC - III	2 + 0 = 2	
	-	-	-	-	DSEC - V	2 + 2 + 2 = 6	SEC - IV	2 + 0 = 2	
	-	-	-	-	DSEC - VI	2 + 2 + 2 = 6	-	-	22
Total Credit									132

2.2 Mandatory Credit courses for award of B.Sc. Degree:

In addition to the compulsory credits of 132, the student has to earn additional 8 credits from following groups by taking/participating/conducting respective activities.

Courses in Group I are compulsory.

The student can earn **maximum 04 credits from an individual group from Group 2 to Group -9.**

These extra credits will not be considered for GPA calculation, however these are mandatory for the completion and award of B. Sc. Degree.

- Group 1:** Physical Education (at F. Y. B. Sc. Sem. I) -01 credit
Physical Education (at F. Y. B. Sc. Sem. II) - 01 credit

(Note: Group I is compulsory for all the students as stated above.)

- Group 2:** Sport representation at College level - 01 credit
Sport representation at University/Statelevel - 02 credits

- Group 3:** National Social Service Scheme (participation in Camp): 01 credits
N.C.C.(with participation in annual camp) -01 credit
N. C. C. (with B certificate/C certificate award)- 02 credits
N.S.S./N.C.C. Republic day parade participation - 04 credits

- Group 4:** Avishkar participation; Extension activity participation, Cultural activity participation -01 credit
Avishkar selection at University level - 02 credits
Avishkar winner at state level - 04 credits

- Group 5:** Research paper presentation at State/National level - 01credits
Research paper presentation at International level - 02 credits

- Group 6:** Participation in Summer school/programme; Short term course (not less than 1-week duration) - 03 credit.

- Group 7:** Scientific Survey, Societal survey, - 02 credits.

- Group 8:** Field Visits; Study Tours; Industrial Visits; Participation in curricular/ cocurricular competitions- 01 Credit.

- Group 9:** Online certificate Courses /MOOC Courses/ Career Advancement Course up to 04 credits (Minimum 10 Hrs. / credit)

2.3 Outlines of Choice Based Credit System [Detailed description of the courses]:

- a) **Core Course**(14 for honours courses; 4 discipline specific papers each for regular courses and 2 papers each for English and Hindi/MIL in B.A./B.Com): The papers under this category are going to be taught uniformly across all universities with 30% deviation proposed in the draft. The purpose of fixing core papers is to ensure that all the institutions follow a minimum common curriculum so that each institution/university adheres to common minimum standard. Also the course designed for papers under this category aim to cover the basics that a student is expected to imbibe in that particular discipline. A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
- b) **Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.
 - i. **Discipline Specific Elective (DSE) Course**(4 for honours courses and 2 each for regular courses): Elective courses offered under the main discipline/subject of study is referred to as Discipline Specific Elective. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).
 - ii. **Dissertation/Project*:** An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.
 - iii. **Generic Elective (GE) Course**(4 for honours courses and 2 each for B.A./B.Com. regular courses): An elective course chosen from an unrelated discipline/subject, with an intention to seek exposure beyond discipline/s of choice is called a Generic Elective. The purpose of this category of papers is to offer the students the option to explore disciplines of interest beyond the choices they make in Core and Discipline Specific Elective papers. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.

P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.
- c) **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; i. Environmental Science and ii. English/MIL(Marathi/Hindi) Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

i. **Ability Enhancement Compulsory Courses (AECC):** Environmental Science, English Communication/Hindi Communication/MIL Communication.

ii. **Skill Enhancement Courses (SEC)**(minimum 2 for honours courses and 4 for regular courses): These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands-on/training/field work. The main purpose of these courses is to provide students life-skills in hands-on mode so as to increase their employability. The list provided under this category are suggestive in nature and each University has complete freedom to suggest their own papers under this category based on their expertise, specialization, requirements, scope and need.

d) Practical/tutorials (One each with every core and discipline/generic specific elective paper): The list of practical provided is suggestive in nature and each university has the freedom to add/subtract/edit practical from the list depending on their faculty and infrastructure available. Addition will however be of similar nature.

e) Introducing Research Component in Under-Graduate Courses

Project work/Dissertation is considered as a special course involving application of knowledge in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper.

3. Eligibility for Admission:

3.1 First Year B.Sc.:

- A. Higher Secondary School Certificate (10+2) or its equivalent Examination with English and three science subjects such as Physics, Chemistry, Mathematics, Biology, Geography, Geology, etc. OR
- B. Three Years Diploma in Pharmacy Course of Board of Technical Education conducted by Government of Maharashtra or its equivalent. OR
- C. Higher Secondary School Certificate (10+2) Examination with English and vocational subject of + 2 level (MCVC) - Medical Lab. Technician (Subject Code = P1/P2/P3)

Admissions will be given as per the selection procedure / policies adopted by the respective college keeping in accordance with conditions laid down by the University of Pune.

Reservation and relaxation will be as per the Government rules.

3.2 Medium of Instruction: English

3.3 Award of Credits:

- Each course having 4 credits shall be evaluated out of 100 marks and student should secure at least 40 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- Each course having 3 credits shall be evaluated out of 75 marks as students should secure at least 30 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.

- Each course having 2 or 1.5 credits shall be evaluated out of 50 marks and student should secure at least 20 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- Each course having 1 credits shall be evaluated out of 25 marks as student shall secure 10 marks (40%) in continuous assessment as well as term end exam to earn full credits of that course.
- GPA shall be calculated based on the marks obtained in the respective subject provided that student should have obtained credits for that course. Structure of marks scheme for choice based credit system program is given in Table 2.

Table 2
Structure of Examination Mark Scheme of Choice Based Credit System for Undergraduate Science Programme

Sem	Course opted	Course Name	Credit	Internal Max Marks	External Max Marks	Total Max Marks
I	CC-1	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-1 Practical	Practical	1.5	15	35	50
	CC-2	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-2 Practical	Practical	1.5	15	35	50
	CC-3	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-3 Practical	Practical	1.5	15	35	50
	CC-4	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-4 Practical	Practical	1.5	15	35	50
			22	180	420	600
II	CC-5	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-5 Practical	Practical	1.5	15	35	50
	CC-6	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-6 Practical	Practical	1.5	15	35	50
	CC-7	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-7 Practical	Practical	1.5	15	35	50
	CC-8	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-8 Practical	Practical	1.5	15	35	50
			22	180	420	600
First Year Total			44	360	840	1200

III	CC-9	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-9 Practical	Practical	2	15	35	50
	CC-10	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-10 Practical	Practical	2	15	35	50
	CC-11	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-11 Practical	Practical	2	15	35	50
	AECC -1A	Environmental Science -1	2	15	35	50
	AECC -2A	English MIL(Marathi/Hindi) Communication -1	2	15	35	50
			22	165	385	550
IV	CC-12	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-12 Practical	Practical	2	15	35	50
	CC-13	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-13 Practical	Practical	2	15	35	50
	CC-14	Paper 1:	2	15	35	50
		Paper 2:	2	15	35	50
	CC-14 Practical	Practical	2	15	35	50
	AECC -1B	Environmental Science -2	2	15	35	50
	AECC -2B	English MIL(Marathi/Hindi) Communication -2	2	15	35	50
			22	165	385	550
Second Year Total			44	330	770	1100

V	DSE - 1A	Paper 1:	2	15	35	50
	DSE - 1B	Paper 2:	2	15	35	50
	DSE - 2A	Paper 3:	2	15	35	50
	DSE - 2B	Paper 4:	2	15	35	50
	DSE - 3A	Paper 5:	2	15	35	50
	DSE - 3B	Paper 6:	2	15	35	50
	DSE-1	Practical Lab 1	2	15	35	50
	DSE -2	Practical Lab 2	2	15	35	50
	DSE -3	Practical Lab 3	2	15	35	50
	SEC-1	Skill Based Course 1:	2	15	35	50
	SEC-2	Skill Based Course 2:	2	15	35	50
			22	165	385	550

VI	DSE - 4A	Paper 1:	2	15	35	50
	DSE - 4B	Paper 2:	2	15	35	50
	DSE - 5A	Paper 3:	2	15	35	50
	DSE - 5B	Paper 4:	2	15	35	50
	DSE - 6A	Paper 5:	2	15	35	50
	DSE - 6B	Paper 6:	2	15	35	50
	DSE-4	Practical Lab 1	2	15	35	50
	DSE-5	Practical Lab 2	2	15	35	50
	DSE-6	Project	2	15	35	50
	SEC-2	Skill Based Course 2	2	15	35	50
	SEC-2	Skill Based Course 2	2	15	35	50
			22	165	385	550
Third Year Total			44	330	770	1100
Total			132			3400

4. Evaluation Pattern:

- 4.1 The course carrying 100 marks shall be evaluated with Continuous Assessment (CA) and University Evaluation (UE) mechanism.
- 4.2 Continuous assessment shall be of 30 marks while University Evaluation shall be of 70 marks. To pass in a course of 4 credit, a student has to secure minimum 40 marks provided that he should secure minimum 28 marks in University Evaluation (UE) and 12 marks (40%) in continuous assessment.
- 4.3 The course carrying 50 marks shall be evaluated with Continuous Assessment (CA) and University Evaluation (UE) mechanism. Continuous assessment shall be of 15 marks while University Evaluation shall be of 35 marks.
- 4.4 To pass in a course of 2 or 1.5 credit, a student has to secure minimum 20 marks provided that he/she should secure minimum 14 marks in University Evaluation (UE) and 6 marks (40%) in continuous assessment..
- 4.5 For Internal examination minimum two tests per paper of which one has to be a written test 10 Marks
- 4.6 Methods of assessment for Internal exams: Seminars, Viva-voce, Projects, Surveys, Field visits, Tutorials, Assignment, Group Discussion, etc (on approval of the head of the centre)
- 4.7 There shall be revaluation of the answer scripts of semester-end examination of theory papers only but not of internal assessment papers as per Ordinance no 134 A and B.

5. ATKT Rules:

- 5.1 Minimum number of credits required to take admission to Second Year of B. Sc.: 31 [70%]
- 5.2 Minimum number of credits required to take admission to Third Year of B.Sc.: 44 credits [100%] to be completed from F.Y. B.Sc. and at least 22 credits from S.Y. B.Sc.

6. Completion of Degree Course:

- 6.1 A student who earns 140 credits, shall be considered to have completed the requirements of the B. Sc. degree program and CGPA will be calculated for such student. On the basis of only 132 credits. The following percentage to grade and grade point is given in Table-3 and respective example of CGPA calculation is given in Table-4.

Table 3
Percentage to Grades and Grade Points

Sr. No.	Grade Letter	Grade Point	Marks
1	O (Outstanding)	10	$90 \leq \text{Marks} \leq 100$
2	A+ (Excellent)	9	$80 \leq \text{Marks} \leq 89$
3	A (Very Good)	8	$70 \leq \text{Marks} \leq 79$
4	B+ (Good)	7	$55 \leq \text{Marks} \leq 69$
5	B (Above Average)	6	$50 \leq \text{Marks} \leq 54$
6	C (Average)	5	$45 \leq \text{Marks} \leq 49$
7	D (Pass)	4	$40 \leq \text{Marks} \leq 44$
8	F (Fail)	0	Marks < 40
9	Ab (Absent)	0	

Table 4
Structure of CGPA and Mark Scheme of Choice Based Credit
System for Undergraduate Science Programme to be
implemented from Academic year 2019-20

Se m	Course opted	Course Name	Cre dit	Interna l Max Marks	Extern al Max Marks	Total Max Marks	Grade Letter (F-O)	Grade point (0 - 10)	Credit Point = (Credit x Grade point)
I	CC-1	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-1 Practical	Practical	1.5	15	35	50	A	8	12.00
	CC-2	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-2 Practical	Practical	1.5	15	35	50	C	5	7.50
	CC-3	Paper 1:	2	15	35	50	D	4	8.00
		Paper 2:	2	15	35	50	A	8	16.00
	CC-3 Practical	Practical	1.5	15	35	50	D	4	6.00
	CC-4	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-4 Practical	Practical	1.5	15	35	50	A	8	12.00
			22	180	420	600			163.50
SGPA						Total Credit point / Total credit for the semester			7.43
II	CC-5	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-5 Practical	Practical	1.5	15	35	50	A	8	12.00
	CC-6	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-6 Practical	Practical	1.5	15	35	50	C	5	7.50
	CC-7	Paper 1:	2	15	35	50	D	4	8.00
		Paper 2:	2	15	35	50	C	5	10.00
	CC-7 Practical	Practical	1.5	15	35	50	B	6	9.00
	CC-8	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-8 Practical	Practical	1.5	15	35	50	A	8	12.00
			22	180	420	600	0		160.50
SGPA						Total Credit point / Total credit for the semester			7.30
First Year Total			44	360	840	1200			323.50
SGPA						Total Credit point / Total credit for the year			7.35

III	CC-9	Paper 1:	2	15	35	50	O	10	20.00
		Paper 2:	2	15	35	50	A+	9	18.00
	CC-9 Practical	Practical	2	15	35	50	A	8	16.00
	CC-10	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-10 Practical	Practical	2	15	35	50	C	5	10.00
	CC-11	Paper 1:	2	15	35	50	B+	7	14.00
		Paper 2:	2	15	35	50	B	6	12.00
	CC-11 Practical	Practical	2	15	35	50	C	5	10.00
	AECC -1A	Environm ental Science - 1 English MIL(Mara thi/Hindi) Commun ication -1	2	15	35	50	B	6	12.00
AECC -2A		2	15	35	50	A	8	16.00	
			22	165	385	550			154.00
SGPA						Total Credit point / Total credit for the semester			7.00

IV	CC-12	Paper 1:	2	15	35	50	O	10	20.00	
		Paper 2:	2	15	35	50	A+	9	18.00	
	CC-12 Practical	Practical	2	15	35	50	A	8	16.00	
	CC-13	Paper 1:	2	15	35	50	B+	7	14.00	
		Paper 2:	2	15	35	50	B	6	12.00	
	CC-13 Practical	Practical	2	15	35	50	C	5	10.00	
	CC-14	Paper 1:	2	15	35	50	B+	7	14.00	
		Paper 2:	2	15	35	50	B	6	12.00	
	CC-14 Practical	Practical	2	15	35	50	C	5	10.00	
	AECC -1B	Environ mental Science - 2	2	15	35	50	D	4	8.00	
	English/ MIL(Mara thi/Hindi) Commun ication -2									
AECC -2B		2	15	35	50	C	5	10.00		
			22	165	385	550			144.00	
SGPA						Total Credit point / Total credit for the semester				6.55
Second Year Total			44	330	770	1100			298.00	

SGPA						Total Credit point / Total credit for the year			6.77
V	DSE - 1A	Paper 1:	2	15	35	50	D	4	8.00
	DSE - 1B	Paper 2:	2	15	35	50	C	5	10.00
	DSE - 2A	Paper 3:	2	15	35	50	D	4	8.00
	DSE - 2B	Paper 4:	2	15	35	50	C	5	10.00
	DSE - 3A	Paper 5:	2	15	35	50	D	4	8.00
	DSE - 3B	Paper 6:	2	15	35	50	C	5	10.00
	DSE-1	Practical Lab 1	2	15	35	50	O	10	20.00
	DSE -2	Practical Lab 2	2	15	35	50	A+	9	18.00
	DSE -3	Practical Lab 3	2	15	35	50	A	8	16.00
	SEC-1	Skill Based Course 1:	2	15	35	50	D	4	8.00
	SEC-2	Skill Based Course 2:	2	15	35	50	C	5	10.00
			22	165	385	550			126.00
SGPA						Total Credit point / Total credit for the semester			5.73
VI	DSE - 4A	Paper 1:	2	15	35	50	D	4	8.00
	DSE - 4B	Paper 2:	2	15	35	50	C	5	10.00
	DSE - 5A	Paper 3:	2	15	35	50	D	4	8.00
	DSE - 5B	Paper 4:	2	15	35	50	C	5	10.00
	DSE - 6A	Paper 5:	2	15	35	50	D	4	8.00
	DSE - 6B	Paper 6:	2	15	35	50	C	5	10.00
	DSE-4	Practical Lab 1	2	15	35	50	O	10	20.00
	DSE-5	Practical Lab 2	2	15	35	50	A+	9	18.00
	DSE-6	Project	2	15	35	50	A	8	16.00
	SEC-2	Skill Based Course 2	2	15	35	50	D	4	8.00
	SEC-2	Skill Based Course 2	2	15	35	50	C	5	10.00
			22	165	385	550			126.00
SGPA						Total Credit point / Total credit for the semester			5.73
Third Year Total			44	330	770	1100			252.00
SGPA						Total Credit point / Total credit for the year			5.73
Total			132			3400			873.50
CGPA						Total Credit point / Total credit for the course			6.62

7. PERFORMANCE INDICES:

The semester end grade sheet will contain grades for the courses along with titles and SGPA. Final grade sheet and transcript shall contain CGPA.

- 7.1 **Semester Grade Point Average (SGPA)** -The performance of a student in a semester is indicated by a number called the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses, seminars and projects registered by the student during the semester.

$$SGPA = \frac{\sum_{i=1}^p C_i G_i}{\sum_{i=1}^p C_i}$$

$$SGPA = \frac{\sum \text{Grade Points Earned} \times \text{Credits for each course}}{\text{Total Credits}}$$

For Example: suppose in a given semester a student has registered for five courses having credits C1, C2, C3, C4, C5 and his / her grade points in those courses are G1, G2, G3, G4, G5 respectively.

Then students

$$SGPA = \frac{C_1 G_1 + C_2 G_2 + C_3 G_3 + C_4 G_4 + C_5 G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

SGPA is calculated up to two decimal places by rounding off.

- 7.2 **Course Grade Point Average (CGPA)**- The CGPA is the weighted average of the grade points obtained in all the courses (Theory/term work/practical/oral/presentation) of first semester to sixth semester for the students admitted in the First year and third to sixth semester for the students directly admitted at Second year. It is calculated in the same manner as the SGPA.

In case of a student passing a failed course or in case of improvement, the earlier grade would be replaced by the new grade in calculation of the SGPA and CGPA.

8. RESULT:

Based on the performance of the student in the semester examinations, the Savitribai Phule Pune University will declare the results and issue the Semester Grade sheets.

The class shall be awarded to a student on the CGPA calculated as mentioned in Rule no. 6.1. The award of the class shall be as per Table 5. and corresponding percentage calculation for the CGPA is given in Table 6. along with all details and examples.

Table 5
CGPA distribution and corresponding class of the degree awarded

Sr. No	CGPA	Class of the Degree awarded
1	9.50 or More than 9.50	Outstanding (O)
2	8.50 or more but less than 9.50	Excellent (A+)
3	7.50 or more but less than 8.50	Very Good (A)
4	6.25 or more but less than 7.50	Good (B+)
5	5.25 or more but less than 6.25	Above Average (B)
6	4.75 or more but less than 5.25	Average (C)
7	4.00 or more but less than 4.75	Pass (D)

Table 6
Percentage calculation of a corresponding CGPA

For the calculation of Percentage from CGPA following equation can be used.

$$\% \text{ of Marks} = \begin{cases} \text{if O grade then } 20 \times \text{CGPA} - 100 \\ \text{if A+ grade then } 10 \times \text{CGPA} - 5 \\ \text{if A grade then } 10 \times \text{CGPA} - 5 \\ \text{if B+ grade then } 12 \times \text{CGPA} - 20 \\ \text{if B grade then } 5 \times \text{CGPA} + 23.75 \\ \text{if C grade then } 10 \times \text{CGPA} - 2.50 \\ \text{if D grade then } 6.6 \times \text{CGPA} + 13.6 \end{cases}$$

The factor considered in the above equations are evaluated from the grade point and marks distribution given in Table 3. The examples of the calculation of percentage are given in the Table 7.

Table 7
Some examples of CGPA to percentage calculations

Obtained CGPA	Equation	Percentage (%)	Grade
10	$20 \times 10 - 100 = 100$	100	O
9.75	$20 \times 9.75 - 100 = 95$	95	O
9.5	$20 \times 9.5 - 100 = 90$	90	O
9.0	$10 \times 9 - 5 = 85$	85	A+
8.0	$10 \times 8 - 5 = 75$	75	A
7.0	$12 \times 7 - 20 = 64$	64	B+
6.67	$12 \times 6.67 - 20 = 60.04$	60.04	B+
6.25	$12 \times 6.25 - 20 = 55$	55	B+
5.25	$5 \times 5.25 + 23.75 = 50$	50	B
4.75	$10 \times 4.75 - 2.50 = 45$	45	C
4.0	$6.6 \times 4.0 + 13.6 = 40$	40	D

While declaring the result, the existing relevant ordinances are applicable. There is also a provision for verification and revaluation. In case of verification, the existing rules will be applicable. The revaluation result will be adopted if there is a change of at least 10% marks and in the grade of the course.

For grade improvement a student will have to take minimum 30% of the requisite number of credits for the concerned degree. These courses will be theory courses from the parent department. Grade improvement programme will be implemented at the end of the academic year. A student can opt for the grade improvement programme only after the declaration of the result for his/her final semester exam, i.e., at the end of the next academic year after passing the final examination and within two years of completion of the degree and only once.

1	Excellent (A+)	4.0 or more but less than 4.5
2	Very Good (A)	3.50 or more but less than 4.0
3	Good (B+)	3.00 or more but less than 3.50
4	Average (B)	2.50 or more but less than 3.00
5	Average (C)	2.00 or more but less than 2.50
6	Pass (D)	1.00 or more but less than 2.00

Table 6

Percentage calculation of a corresponding CGPA

$$\text{For the calculation of Percentage from CGPA following equation can be used}$$

$$\text{If A grade then } 20 \times \text{CGPA} - 100$$

$$\text{If B grade then } 10 \times \text{CGPA} - 5$$

$$\text{If C grade then } 10 \times \text{CGPA} - 5$$

$$\text{If D grade then } 10 \times \text{CGPA} - 10$$

$$\text{If E grade then } 5 \times \text{CGPA} + 23.75$$

$$\text{If F grade then } 10 \times \text{CGPA} - 2.50$$

$$\text{If G grade then } 0.8 \times \text{CGPA} + 13.8$$

The grade considered in the above equation are evaluated from the grade point and marks distribution given in Table 7. The examples of the calculation of percentage are given in Table 7.

Table 7

Some examples of CGPA to percentage calculation

Grade	Percentage (%)	Equation	Calculated CGPA
A	100	$20 \times 10 - 100 = 100$	10
B	95	$10 \times 9.5 - 5 = 95$	9.5
C	90	$10 \times 9 - 5 = 90$	9
D	85	$10 \times 8.5 - 5 = 85$	8.5
E	75	$5 \times 7.5 + 23.75 = 75$	7.5
F	64	$10 \times 6.4 - 2.50 = 64$	6.4
G	60.04	$0.8 \times 60.04 + 13.8 = 60.04$	60.04
H	55	$12.8 \times 5.5 + 18.25 = 55$	5.5
I	50	$5 \times 5 + 23.75 = 50$	5
J	45	$10 \times 4.5 - 2.50 = 45$	4.5
K	40	$0.8 \times 40 + 13.8 = 40$	40

While declaring the result the existing relevant ordinances are applicable. There is also a provision for verification and revaluation. In case of verification, the existing rules are applicable. The revaluation result will be adopted if there is a change of at least 10% and in the grade of the course.



शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

दूरध्वनी क्र. : ०२०-२५६०१२५७/५८/५९

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संकेतस्थळ : www.unipune.ac.in

सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

Savitribai Phule Pune University
(Formerly University of Pune)

Academic Section

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संदर्भ क्र. : सीबीएच/६९३

दिनांक : ३१/०१/२०१९

परिपत्रक क्र. १३२/२०१९

विषय:— शैक्षणिक वर्ष २०१९-२०२० पासून मानवविज्ञान विद्याशाखेअंतर्गत येणा-या सर्व विषयांना (Law विषय सोडून) (Choice Based Credit System) नुसार बी.ए. अभ्यासक्रमासाठी १३२ क्रेडीट व एम.ए. अभ्यासक्रमासाठी ६४ क्रेडीटच्या आराखडयास आणि Question Paper Pattern ला मान्यता देणेबाबत.

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार कळविण्यात येते की, मानवविज्ञान विद्याशाखेअंतर्गत येणा-या सर्व विषयांना (Law विषय सोडून) (Choice Based Credit System) नुसार बी.ए. अभ्यासक्रमासाठी १३२ क्रेडीट व एम.ए. अभ्यासक्रमासाठी ६४ क्रेडीटच्या आराखडयास आणि Question Paper Pattern ला शैक्षणिक वर्ष २०१९-२०२० पासून मान्यता देण्यात येत आहे.

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मा. प्राचार्य, सर्व कला महाविद्यालये यांना विनंती की, सदर परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून दयावा.

उपकुलसचिव
(शैक्षणिक विभाग)

प्रत माहितीसाठी व पुढील योग्य त्या कार्यवाहीसाठी:—

१. मा. अधिष्ठाता, मानवविज्ञान विद्याशाखा
२. मा. प्राचार्य, सर्व कला महाविद्यालये
३. मा. संचालक, परीक्षा व मूल्यमापन मंडळ, सावित्रीबाई फुले पुणे विद्यापीठ
४. मा. संचालक, स्पर्धा परीक्षा केंद्र
५. मा. संचालक, (आंतरराष्ट्रीय केंद्र)
६. मा. प्रमुख, विद्यापीठ उपकेंद्र :अहमदनगर, नाशिक.
७. उपकुलसचिव, परीक्षा (१,२)
८. सिस्टीम ऑनॅलिस्ट डेटा प्रोग्रेसिंग युनिट
९. उपकुलसचिव, शैक्षणिक प्रवेश विभाग
१०. उपकुलसचिव, नियोजन व विकास विभाग
११. उपकुलसचिव, शैक्षणिक पात्रता विभाग
१२. उपकुलसचिव (सभा व दफ्तर विभाग)
१३. सहाय्यक कुलसचिव (परीक्षा समन्वय विभाग)
१४. सहाय्यक कुलसचिव (परीक्षा—एस.अॅण्ड टी.विभाग)
१५. सहा. कुलसचिव (गोपनीय कक्ष)
१६. वरिष्ठ कायदा अधिकारी
१७. जनसंपर्क अधिकारी
१८. सहाय्यक कुलसचिव (संलग्नता कक्ष)
१९. सहाय्यक कुलसचिव (प्र—कुलगुरु कार्यालय)
२०. कक्षाधिकारी (बहिःस्थ विभाग)

विद्यापरिषद ठराव क्र. — ब ४६ पीए/४६/१९ दि. ११ जून, २०१९



सावित्रीबाई फुले पुणे विद्यापीठ
(पूर्वीचे पुणे विद्यापीठ)

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शैक्षणिक विभाग

गणेशखिंड, पुणे-४११ ००७

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Savitribai Phule Pune University
(Formerly University of Pune)

संदर्भ क्र : सीबीसीएम/६२९

दिनांक : ३ जुलै, २०१९.

परिपत्रक क्र. १३८ / २०१९

विषय : वाणिज्य व व्यवस्थापन विद्याशाखेंतर्गत बी.कॉम., बी.कॉम.
(Restructuring Pattern) व बी.कॉम. (Vocational Pattern) या पदवीच्या
सुधारित आराखडयास (Semester & Choice Based Credit System) व
प्रथम वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२०
पासून मान्यता देण्याबाबत...

विद्यापीठ अधिकार मंडळाने घेतलेल्या निर्णयानुसार सर्व संबंधितांस या
परिपत्रकाद्वारे कळविण्यात येत आहे की, वाणिज्य व व्यवस्थापन विद्याशाखेतील
बी.कॉम., बी.कॉम. (Restructuring Pattern) व बी.कॉम.(Vocational Pattern) या
पदवीच्या सुधारित आराखडयास (Semester & Choice Based Credit System) व प्रथम
वर्षाच्या सुधारित अभ्यासक्रमास शैक्षणिक वर्ष २०१९-२० पासून मान्यता
देण्यात येत आहे.

सदर अभ्यासक्रम विद्यापीठाच्या www.unipune.ac.in या संकेतस्थळावर syllabi >
Revised syllabus from the Academic Year 2019 > Faculty - Commerce & Management
- I) Commerce या शीर्षकाखाली उपलब्ध करण्यात आला आहे.

मा. प्राचार्य, विद्यापीठाशी संलग्न सर्व महाविद्यालय यांना विनंती की, सदर
परिपत्रकाचा आशय सर्व संबंधितांच्या निदर्शनास आणून द्यावा.

उपकुलसचिव
(शैक्षणिक विभाग)

प्रत माहिती व पुढील योग्य त्या कार्यवाहीसाठी —:

१. मा. अधिष्ठाता, वाणिज्य व व्यवस्थापन विद्याशाखा
२. मा. सहयोगी अधिष्ठाता, वाणिज्य व व्यवस्थापन विद्याशाखा
३. मा. प्राचार्य, सर्व संलग्न महाविद्यालये
४. मा. विभागप्रमुख, वाणिज्य विभाग
५. मा. संचालक, परीक्षा व मूल्यमापन मंडळ
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७. मा. संचालक, आंतरराष्ट्रीय विद्यार्थी केंद्र
८. मा.प्रमुख, विद्यापीठ उपकेंद्र : अहमदनगर, नाशिक
९. उपकुलसचिव, परीक्षा (१ व २)
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१७. सहायक कुलसचिव, परीक्षा समन्वय
१८. सहायक कुलसचिव, परीक्षा — एस. अँड टी. विभाग
१९. वरिष्ठ कायदा अधिकारी
२०. सहायक कुलसचिव, संलग्नता विभाग
२१. जनसंपर्क अधिकारी
२२. कक्षाधिकारी, बहिस्थ विभाग

◆ मा. विद्यापरिषद ठराव क्रमांक —:

वि.प.क्र. ब २७ पीए/२७/२०१९, दि. ११ जून, २०१९