# Choice Based Credit System (CBCS) For Academic Excellence

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#### **Preliminaries**

- Objectives of Academic Programmes:
  - Bachelor
  - Masters
  - Integrated Masters
  - M Phil
  - PhD
  - Integrated Research Degree

- Structuring Academic Session
  - Annual
  - Two Semesters (+ Summer)
  - Tri-semester (+ Summer)
  - Quarter System (+ Summer)

- Syllabus Making
  - Objectives of Academic programme
  - Course Structure : Foundational/Core/Basic/Introductory.
     higher level :Specialized; Cognate/interdisciplinary.Applied
     Skill based
  - Course objectives
  - Course Contents
  - Courses Sequence

### **Operational Definitions**

- Choice Based Credit System (CBCS): The CBCS provides choice for students to select courses (core, elective or minor or soft skill courses) from the basket of courses available in the institution or elsewhere.
- Courses: Also referred as 'papers'. All courses need not carry the same weight called Credit. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.

### **Operational Definitions**

- Credit Based Semester System (CBSS): Under the CBSS, the requirement for awarding a degree or diploma or certificate is prescribed in terms of kind and level of courses with number of credits to be completed by the students.
- **Credit:** A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching(lecture or tutorial) or two hours of practical work/field work per week, say for 15 teaching weeks of a semester.

#### **CBCS** –**Cont**.

**Grade Point**: It is a numerical weight allotted to each letter grade on a 10-point scale.

**Letter Grade**: It is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B, C, P and F.

**Semester Grade Point Average (SGPA):** It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester.

Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

#### **Programme Structure**

- 3.1 Programme Duration: The duration of an Undergraduate Programme and Post Graduate programme shall be a minimum of 6 Semesters and 4 semesters respectively. However, in case of B.Tech. or a four year programme, the duration shall be of 8 semesters. The Masters Degree/UG Programmes in the departments under different faculties/institutes/constitute colleges in the University are full time courses of study. The Odd Semester may be scheduled from July to December and even semester from January to June.
- 3.2 Course Code: Each course shall have an alpha numeric code, which includes a three letter code representing the subject (e.g. PHY for Physics, SOC for Sociology) and a three digit number of course. Undergraduate courses will have numbers ranging from 100-399. Post graduate courses will have numbers ranging from 500-699. Mphil and Dphil courses will have numbers ranging from 700-899.

#### Course Credit System/Structure:

- In general a certain quantum of work measured in terms of credits is laid down as the requirement for a particular degree. The student acquires credits by passing courses every semester, the amount of credit associated with a course being dependent upon the number of hours of instruction per week in that course.
- There are varied courses- lecture courses and practical/lab/field-based courses. The credit (C) for a course is dependent on the number of hours of instruction per week in that course. One Credit is equivalent to one hour of teaching (lecture or tutorial) or two hourse of practical work.field work per week. Thus, for example, a lecture course having two lectures and one tutorial per week throughout the semester carries a credit of 3 (showing values of L-T-P-C as 2-1-0-3. Similarly, a practical/lab/field-based course having one tutorial and four laboratory hours per week throughout semester carries a credit of 3 (Showing values of L-T-P-C as 0-1-2-3). Credits are also assigned to Practical Training, Seminar and Projects. Sports/NSS/NCC etc. are, however, non-credit requirements. For professional courses, summer internship / workshops/ trainings ranging from four to six weeks would also be considered as non-credit requirements.

- a). Core Courses shall be those, knowledge of which is deemed essential for students of a particular programme.
- b). Elective Courses are intended to allow students to acquire knowledge and skills in areas of her/his choice. Such courses may be offered by the concerned department and/or other departments in various schools of study within the university or outside the University.
- c). Credit Transfer: A student may be allowed to cross the boundary of own Department /school/faculty and take courses elsewhere with permission and earn credits required for the degree.

## Other Salient Features of the CHOICE BASED CREDIT SYSTEM (CBCS)

- The courses of study and the scheme of examination for the degree in each subject shall be such as may be approved by the Academic council
- Each Department/Centre shall have a student's advisor(s) who shall advise the students about choosing courses offered under open choice.
- Each department/centre shall prepare a student's handbook which shall contain complete list of courses including the core and the open choices.

- A student would have the choice to take courses from other departments/centres that are deemed appropriate by the Board of Studies of the parent Department/Centre and based on the advise from the student advisor.
- At the beginning of the semester, a student shall fill up a plan declaring the choice of courses to be taken in consultation with the student's Advisor. Depending upon the availability of courses in each semester every student must register for the courses she/he intends to undergo in that semester with the consent of the Student Advisor and the Head/Coordinator of the Department/Centre.

- Ordinarily, each semester shall have uniform distribution of credits. However, depending on specific requirement of UGC, AICTE,NCTE total credits may vary from semester to semester and subjects to subjects.
- The semester wise Credit Points may vary from program to program but will usually be 20 credits. The minimum number of total credits earned by the learner to achieve undergraduate degree in Arts/Science/Law in a 3-year program will be 120. The minimum number of total credits earned by the learner to achieve undergraduate degree in B.Tech. or 4-year B.S. programs will be 160. The minimum number of total credits earned by the learner to achieve a degree in a 5-year integrated program will be 200. The minimum number of total credits earned by the learner to achieve Postgraduate degree in a 2-year program will be 80.

### Student Evaluation and Examination

- A. Scheme of Examination
- The examination system has to develop keeping a numbers of factors: Nature of course (s), number of students, and admin consideration.
  - The scheme of Examination shall be divided into two parts: Continuous internal assessment and end semester examination. Internal Assessment includes Assignments, Seminars, Case Studies, Quizzes, Viva, Unit Tests etc. The internal assessment may be of 50% followed by the end semester examination of 50%.
  - An institution may adopt other system.

#### B. Continuous Assessment

- Evaluation of continuous assessment for each course shall be made on the basis of the student's performance in the best two of the three written internal tests/assignments/presentations organized by the course instructor.
- The schedule for the continuous assessment shall be made known to the student sat the beginning of the semester. The tests/assignments/presentations shall be evenly spaced out throughout the semester.
- The marks/grades awarded for continuous assessment shall be made known to the candidates asap ordinarily within ten days of the conduct of the test etc. Candidates may seek clarifications, if any, about their performance from the teacher concerned within a week of the declaration of marks/grades.

- End-Semester Examination: The system may vary as per admin consideration of institution.
  - Each semester shall have normally 90 teaching days excluding examination. A student shall be eligible to appear in end semester examination only if he/she has at least 75% of attendance in respect of classes delivered in each paper/course separately..
  - The question paper for the end-semester examinations for each course shall be set by the course instructor. It shall be the responsibility of the paper setter to ensure that the syllabus for the course is adequately covered in the question paper.

- The answer scripts for End-Semester Examination shall be evaluated preferably by the respective paper-setters.
- The pattern of the End-semester examination has to be approved by the faculty committee of the concerned Centre/Department/Institute and should be given to the students before the End-semester exam.
- The marks will be given for all examinations and they will be converted into grade (quality) points either based on a absolute or relative grading system. The semester-end, final grade sheets and transcripts will have only credits, grades, grade points, SGPA and CGPA.
- The end-semester Practical Examination shall be jointly conducted by an external and an internal examiner. If for any reason, the external examiner is not available, a panel of three internal examiners appointed.

## D. Moderation of Question Papers

- There shall be a Moderation Board for each subject/programme of study to moderate the question papers and it shall consist of (a) Head/Coordinator of the concerned Department/Centre and (b) Two senior teachers nominated by the Head/coordinator of the concerned Department/Centre.

#### E. Board of Examiners

- Each Department/Centre/Course Advisory Committee of the Department/Centre shall constitute a Board of Examiners of at least three members with at least two external members to oversee all work connected with evaluation of sessional work. The Board member from the Department/Centre/Institute shall be the ex-officio Chairman of this Committee.
- It shall be the responsibility of the Board of Examiners to maintain the standard of evaluation. The Board will ensure fairness of evaluation by going through the evaluated scripts/assignment reports for internal/continuous assessment and the end semester examination. The Board will also address complaints, if any from the students taking a particular course. The Board will also verify and evaluate the grading method (Absolute or Relative) used by the Course instructor.
- The evaluation/grades approved by the Board of Examiners will be final.

## Calculating Semester Grade Points Average (SGPA)

• SGPA for the *j*-th semester is calculated as:

$$SGPA_j = \frac{\sum_{i=1}^n m_i c_i}{\sum_{i=1}^n c_i}$$

• n is the number of courses in the jth semester,  $m_i$  denotes the numerical  $c_i$  value of the grade obtained in the ith course of the semester, denotes the number of credit for the ith course of the semester.

Course	1	II	III	IV	V	VI	VII
Credit	2	2	4	2	2	2	2
Numerical Grade	7	8	5	7	6	8	8

The SGPA for the j<sup>th</sup> semester is calculated as :

$$SGPA_j = \frac{7 \times 2 + 8 \times 2 + 5 \times 4 + 7 \times 2 + 6 \times 2 + 8 \times 2 + 8 \times 2}{2 + 2 + 4 + 2 + 2 + 2} = \frac{108}{16} = 6.75$$

The Cumulative Grade Point Average (CGPA) for 'k' semesters is given as:

$$CGPA = \frac{\sum_{j=1}^{k} (SGPA_j \times C_j)}{\sum_{j=1}^{k} C_j}$$

where,  $C_i$  is the total number of credits in the j<sup>th</sup> Semester.

## Calculating Cumulative Grade Points Average (CGPA)

#### Calculation of CGPA

Consider the SGPAs as obtained by a student in four semesters along with total number of credits in each semester, respectively, as given below:

Semester	First	Second	Third	Fourth
SGPA	6.75	6.00	8.12	7.62
Total Credit	16	20	18	16

$$CGPA = \frac{(6.75 \times 16) + (6.00 \times 20) + (8.12 \times 18) + (7.62 \times 16)}{16 + 20 + 18 + 16} = \frac{108 + 120 + 146.16 + 121.92}{70}$$

$$CGPA = \frac{496.06}{70} = 7.08$$

## For conversion of points into grades

Grade	Grade	BA B Ed /	BA LLB /	M.A.	M.Sc. / M. Tech /
	Point	BSc B Ed	BSc LLB		MPhil / Ph.D.
A+	10	90 & above	85 & above	85 & above	90 & above
Α	9	80 to<90	75 to<85	80 to <85	85 to <90
Α-	8	70 to <80	65 to <75	70 to <80	75 to <85
B+	7	60 to <70	60 to <65	60 to <70	65 to <75
В	6	50 to <60	55 to <60	55 to <60	60 to <65
B-	5	40 to <50	50 to <55	50 to <55	55 to <60
С	4		45 to <50	40 to <50	45 to <55
F	0	Less than 40	Less than 45	<40	<45