

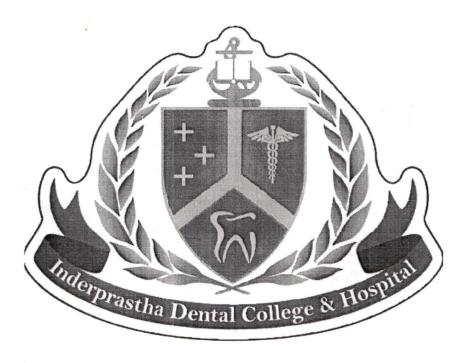
Inderprastha Dental College & Hospital

STEPS TAKEN TO ATTAIN SPECIFIC COMPETENCIES

Steps taken by institution for attainment of specific students/ intern competencies:

- Integrating basic medical and dental sciences knowledge by introduction of basic sciences lectures
- Introduction to basic protocol of the department on the very first day of the posting.
- Conducting mid post & End post viva for evaluation of students' improvement throughout the curriculum
- Implementation of clinical & practical knowledge/skills by interacting with patients in clinics under supervision of faculty
- Enhancing theoretical knowledge by conducting discussions for various important topics on regular basis
- Conducting seminar for each student (BDS/MDS) to enhance the basic theoretical knowledge
- Allowing the students to assist in special cases
- Conducting mentor mentee programs on regular basis
- Enhancing the students' knowledge by Conducting various CDE programs in different specialties to keep them updated about various latest technologies
- Enhancing the knowledge by Field visits and organizing regular Camps
- To access students for clinical and practical skills, 10-point UGC Grading System is adopted as directed by DCI. For reference document is attached.





Inderprastha Dental College & Hospital

46/1,Site-IV, Industrial Area, Sahibabad, Ghaziabad-201010(U.P.)

GRADING SYSTEM

UGC GUIDELINES ON ADOPTION OF CHOICE BASED CREDIT SYSTEM

UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI — 110 002

UGC GUIDELINES ON ADOPTION OF CHOICE BASED CREDIT SYSTEM

1. PREAMBLE

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching-learning process, examination and evaluation systems, besides governance and other matters.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated these guidelines.

2. APPLICABILITY OF THE GRADING SYSTEM

These guidelines shall apply to all undergraduate and postgraduate level degree, diploma and certificate programs under the credit system awarded by the Central, State and Deemed to be universities in India.

3. DEFINITIONS OF KEY WORDS

- 1. **Academic Year**: It is the period necessary to complete an actual course of study within a year. It comprises two main semesters i.e., (one odd + one even) and one supplementary semester.
- Choice Based Credit System (CBCS): The credit based semester system is one which
 provides flexibility in designing curriculum and assigning credits based on the course
 content and hours of teaching along with provision of choice for the student in the course
 selection.
- 3. Course: A course is a subject offered by a department for learning in a particular semester
- 4. Credit Point: It is the product of grade point and number of credits for a course.
- 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.
- 6. 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.
- 7. Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.
- 8. **Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters S, A+, A, B+, B, C.
- 10. **Program:** Means, UG degree program: Bachelor of Technology (B.Tech); PG degree program: Master of Technology (M.Tech) / Master of Business Administration (MBA).
- 11. 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. It shall be expressed up to two decimal places.

- 12. **Semester:** It is a period of study consisting of 15 to 18 weeks of academic work equivalent to normally 90 working days. Odd semester commences usually in July and even semester in December of every year.
- 13. **Grade Sheet:** Based on the grades earned, a grade sheet shall be issued to all the registered students after every semester. The grade sheet will display the course details (course code, course name, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.
- 14. Transcript: The Transcript will be issued to the student as and when required and will contain a consolidated record of all the courses undergone by him/her, grades obtained and CGPA upto the date of issue of transcript. Only last letter grade obtained in a course by the student upto the date of issue of transcript will be shown in the Transcript.

4. SEMESTER SYSTEM AND CHOICE BASED CREDIT SYSTEM

The Indian Higher Education Institutions have been moving from the conventional annual system to semester system. Currently many of the institutions have already introduced the choice based credit system. The semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning. It is desirable that the HEIs move to CBCS and implement the grading system.

A course defines learning objectives and learning outcomes and comprises lectures / tutorials / laboratory work / field work / project work / comprehensive examination / seminars / assignments / MOOCs / alternative assessment tools / presentations / self-study etc., or a combination of some of these. Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.

5. TYPES OF COURSES

Courses in a curriculum may be of three kinds: Foundation / Skill, Core and Elective Courses.

Foundation / Skill Course:

Foundation courses are the courses based upon the content leads to enhancement of skill and knowledge as well as value based and are aimed at man making education. Skill subjects are those areas in which one needs to develop a set of skills to learn anything at all. They are fundamental to learning any subject.

Professional Core Courses:

There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a program in the said discipline of study.

Elective Course:

Electives provide breadth of experience in respective branch and application areas. Elective course is a course which can be chosen from a pool of courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline / domain
- Nurturing student's proficiency / skill.

An elective may be Professional Elective, is a discipline centric focusing on those courses which add generic proficiency to the students or may be Open Elective, chosen from unrelated disciplines.

Audit Courses

In Addition, a student can register for courses for audit only with a view to supplement his/her knowledge and/or skills. Here also, the student's grades shall have to be reflected in the Memorandum of Grades. But, these shall not be taken into account in determining the student's academic performance in the semester. In view of this, it shall not be necessary for the institute to issue any separate transcript covering the audit courses to the registrants at these courses. Its result shall be declared as "Satisfactory" or "Not Satisfactory" performance.

Mandatory Courses (MC)

These courses are among the compulsory courses but will not carry any credits. However, a pass in each such course during the program shall be necessary requirement for the student to qualify for the award of Degree. Its result shall be declared as "Satisfactory" or "Not Satisfactory" performance.

6. EXAMINATION AND ASSESSMENT

The HEIs are currently following various methods for examination and assessment suitable for the courses and programs as approved by their respective statutory bodies. In assessing the performance of the students in examinations, the usual approach is to award marks based on the examinations conducted at various stages (sessional, mid-term, end-semester etc.,) in a semester. Some of the HEIs convert these marks to letter grades based on absolute or relative grading system and award the grades. There is a marked variation across the colleges and universities in the number of grades, grade points, letter grades used, which creates difficulties in comparing students across the institutions. The UGC recommends the following system to be implemented in awarding the grades and CGPA under the credit based semester system.

6.1 Letter Grades and Grade Points:

Performances of students in each course are expressed in terms of marks as well as in Letter based on absolute grading system. The UGC recommends a 10-point grading system with the following letter grades as given in the Table 1.

Range of Marks	Grade Point	Letter Grade
100 – 90	10	S (Superior)
89 – 80	9	A+ (Excellent)
79 – 70	8	A (Very Good)
69 – 60	7	B+ (Good)
59 – 50	6	B (Average)
49 – 40	5	C (Pass)
Below 40	0	F (Fail)
Absent	0	AB (Absent)
Authorized Break of Study	0	ABS

❖ A student is deemed to have passed and acquired to correspondent credits in particular course if s/he obtains any one of the following grades: "S", "A+", "A", "B+", "B", "C".

- A student obtaining Grade F shall be considered Failed and will be required to reappear in the examination.
- ❖ For non credit courses, 'Satisfactory' or "Not Satisfactory" is indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.
- "SA" denotes shortage of attendance (as per item 11) and hence prevention from writing Semester End Examination.
- * "W" denotes withdrawal from the exam for the particular course.
- At the end of each semester, the institute issues grade sheet indicating the SGPA and CGPA of the student. However, grade sheet will not be issued to the student if s/he has any outstanding dues.

6.2 Fairness in Assessment

Assessment is an integral part of system of education as it is instrumental in identifying and certifying the academic standards accomplished by a student and projecting them far and wide as an objective and impartial indicator of a student's performance. Thus, it becomes bounden duty of a University to ensure that it is carried out in fair manner. In this regard, UGC recommends the following system of checks and balances which would enable Universities effectively and fairly carry out the process of assessment and examination.

- i. In case of at least 50% of core courses offered in different programs across the disciplines, the assessment of the theoretical component towards the end of the semester should be undertaken by external examiners from outside the university conducting examination, who may be appointed by the competent authority. In such courses, the question papers will be set as well as assessed by external examiners.
- ii. In case of the assessment of practical component of such core courses, the team of examiners should be constituted on 50 50 % basis. i.e. half of the examiners in the team should be invited from outside the university conducting examination.
- iii. In case of the assessment of project reports / thesis / dissertation etc. the work should be undertaken by internal as well as external examiners.

7. COMPUTATION OF SGPA AND CDPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The credit points earned by a student are used for calculating the Semester Grade Point Average (SGPA) and the Cumulative Grade Point Average (CGPA), both of which are important performance indices of the student. SGPA is equal to the sum of all the total points earned by the student in a given semester divided by the number of credits registered by the student in that semester. CGPA gives the sum of all the total points earned in all the previous semesters and the current semester divided by the number of credits registered in all these semesters. Thus,

$$SGPA = \sum_{i=1}^{n} (C_i G_i) / \sum_{i=1}^{n} C_i$$

Where, C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course and n represent the number of courses in which a student is registered in the concerned semester.

$$CGPA = \sum_{i=1}^{m} (C_j S_j) / \sum_{i=1}^{m} C_j$$

Where, S_j is the SGPA of the j^{th} semester and C_j is the total number of credits upto the semester and m represent the number of semesters completed in which a student registered upto the semester.

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

8. ILLUSTRATION OF COMPUTATION OF SGPA AND CGPA

8.1 Illustration for SGPA

Course Name	Course Credits	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	3	A	8 .	3 x 8 = 24
Course 2	4	B+	7	$4 \times 7 = 28$
Course 3	3	В	6	3 x 6 = 18
Course 4	3	S	10	3 x 10 = 30
Course 5	3	C	5	$3 \times 5 = 15$
Course 6	4	В	6	$4 \times 6 = 24$
	20			139

Thus,
$$SGPA = 139 / 20 = 6.95$$

8.2 Illustration for CGPA

Semester 1	Semester 2	Semester 3	Semester 4
Credit: 20	Credit: 22	Credit: 25	Credit: 26
SGPA: 6.9	SGPA: 7.8	SGPA: 5.6	SGPA: 6.0
Semester 5	Semester 6		
Credit: 26	Credit: 25		
SGPA: 6.3	SGPA: 8.0		

Thus,
$$CGPA = \frac{20x6.9 + 22x7.8 + 25x5.6 + 26x6.0 + 26x6.3 + 25x8.0}{144} = 6.73$$

Dental Council of India BDS PROGRAM REGULATIONS 2022



ANNEXURE B CURRICULUM FRAMEWORK

DENTAL COUNCIL OF INDIA, Temple Lane, Kotla Road, New Delhi 110 002.

awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students of the course and the grades are awarded based on a cut-off marks or percentile. Under the absolute grading, the marks are converted to grades based on predetermined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.

ii. The UGC recommends a 10-point grading system with the following letter grades as given below:

Letter Grade	Grade Point
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Above Average)	6
C (Pass)	5
F(Fail)	0
Ab (Absent)	0

- iii. A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.
- iv. For non credit courses 'Satisfactory' or 'Unsatisfactory' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.
- v. The universities can decide on the grade or percentage of marks required to pass in

a course and also the CGPA required to qualify for a degree taking into consideration the recommendations of the statutory professional councils such as AICTE, MCI, BCI, NCTE etc.,

CREDIT HOURS:

A typical course credit is equivalent to 1 didactic hour per week per semester or 2 practical hours per week per semester. Most statutory councils recommend over 18 weeks of minimum training per semester. However, as per DCI regulation 2007, a dental school is expected to work 240 days. This translates to 120 working days per semester. This computes to 20 weeks per semester. A course credits hour can be calculated to include all evaluation periods and in certain cases alternative forms of learning as well.

The current undergraduate course shall consist of 4.5 years of learning with 1 year of Internship (CRRI) where students are allowed to practice under the supervision of their Department Heads. The training period, spanning 4.5 years, has been divided into 9 semesters where students can be trained in a systematic manner encompassing the various clinical and non-clinical disciplines.

COMPETENCY BASED EDUCATION:

Competency based education system aims at evolvement and expansion of critical thinking and reasoning, instill professionalism, develop communication and interpersonal skills, betterment of oral/general health promotion of the individual and society, inclusion

odontology, oral medicine & radiology, periodontology, oral & maxillofacial surgery, conservative dentistry & endodontics, orthodontics & dentofacial orthopedics, oral & maxillofacial prosthodontics, pediatric & preventive dentistry, medical bioethics and clinic administration.

Computation of Credits:

The above mentioned Course credits have been computed based on the hours requirements stipulated in the previous DCI regulation. 20 theory hours is equivalent to 1 credit and 40 practical hours is equivalent to 1 credit.

Subject	Lecture Hours	Theory Credits	Practical Hours	Clinical hours	Practical + Clinical Credits	Total Hours	Total Credits round off
Human Anatomy, Embryology, Histology & Medical Genetics	100	5	175	0	4.375	275	9
Human Physiology	120	6	60	0	1.5	180	8
Biochemistry	70	3.5	60	0	1.5	130	5
Dental Anatomy, Oral Physiology, Oral Embryology, Dental Histology	105	5.25	250	0	6.25	355	11
Dental Materials	80	4	240	0	6	320	10
Pharmacology	70	3.5	20	0	0.5	90	4
Preclinical Oral & Maxillofacial Prosthodontics	25	1.25	300	0	7.5	325	9
Microbiology	65	3.25	50	0	1.25	115	4.5
General Pathology	55	2.75	55	0	1.375	110	4
Preclinical Conservative Dentistry	25	1.25	200	0	5	225	6
General Medicine	60	3	0	90	2.25	150	5
General Surgery	60	3	0	90	2.25	150	5

		5280	173				
Bioethics	40	2	0	0	0	40	2
Fundamentals of Practice Management	40	2	0	0	0	40	2
Pediatric and Preventive Dentistry	65	3.25	0	170	4.25	235	7.5
Oral & Maxillofacial Prosthodontics	110	5.5	0	370	9.25	480	15
Orthodontics and Dentofacial Orthopedics	50	2.5	60	110	4.25	220	7
Conservative dentistry & Endodontics	110	5.5	0	370	9.25	480	15
Oral and Maxillofacial Surgery	70	3.5	0	270	6.75	340	10
Periodontology	80	4	0	170	4.25	250	8
Oral Medicine & Radiology	65	3.25	0	170	4.25	235	7.5
Forensic Odontology	25	1.25	30	0	0.75	55	2
Oral Pathology, Microbiology	120	6	100	0	2.5	220	8.5
Public Health and Preventive Dentistry	60	3	0	200	5	260	8

ELECTIVE SUBJECTS:

On an average, one subject requires 240 hours. Excluding time devoted to the core subjects, 360 Hours extra hours could be utilised for elective subjects. Each elective can carry 2 credits (40 hours). Each student is expected to complete 1 elective per semester. Overall, a student will have time for upto 9 electives over a period of 4.5+1 years. Elective subjects may be categorised into alternative dentistry, advanced clinical training, research, ethics and professionalism, biomedical science, clinic administration. However, university can create new categories for electives with the changing state of science and

DCI - CBCS Framework for BDS 1501

Course (Subject) Name: Human Anatomy, Embryology, Histology & Medical Genetics

Aim and Scope of Human Anatomy, Embryology, Histology & Medical Genetics:

The students should gain knowledge and insight into the structural and functional anatomy of the normal human head, neck & brain, functional histology, appreciation of genetic basis of inheritance and disease, and development of clinically important structures so that relevant anatomical & scientific foundations are laid down for the clinical years of the BDS program.

Course Prerequisites:

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	05	100
Practical/ Clinical	4.375	175
Total	09	275

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Human Physiology

Aim and Scope of Physiology:

Human Physiology is the specialty of basic medical sciences that aims to understand the mechanisms of living things from the basis of cell function, at the ionic and molecular level to the integrated functioning of the various organ systems of the whole body.

Course Prerequisites:

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to the Dentist Act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credit is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	6.5	120
Practical/ Clinical	1.5	60
Total	8	180

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Biochemistry

Aim and Scope of Biochemistry:

Biochemistry is the branch of Science that explores the chemical and biological processes within and related to living organisms. Biochemistry deals with the study of structure and function of Biomolecules such as Carbohydrates, Proteins and Lipids. Knowledge in Biochemistry helps to develop and improve skills in clinical diagnosis, interpretation and to understand the biology of oral health and disease.

Course Prerequisites

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	3.5	70
Practical/ Clinical	1.5	60
Total	5.0	130

Non CGPA credits

Each student is expected to attend at least one continuing dental education (CDE) program per semester and during internship. A CDE credit point is equivalent to 1 hour of didactic training. Therefore at least 20 CDE credit points shall be considered for 1 course Credit. Students shall have the flexibility to complete the CDE credit requirements during any semester or internship.

Total CDE requirement = 10 Course credits or 200 CDE points to be completed by the end of internship.

CRRI CREDITS:

Each student is expected to complete clinical exposure equivalent to the following hours spent in managing patients related to a particular speciality. If an institution is following a comprehensive clinical training, individual posting days shall not be considered, instead hours shall be computed based on the amount of time spent in planning and management of patients related to a particular specialty. If the epidemiological presentation of a disease changes in the society, then based on the stakeholder feedback, the academic council can modify the hours allotted to a speciality. However, 365 days of CRRI training cannot be reduced.

	Subject	Posting Days	Hours	Rounded off Credits
1	Oral and Maxillofacial Surgery	45	315	8
2	Oral Medicine & Radiology	25	175	4
3	Orthodontics and Dentofacial Orthopedics	15	105	2
4	Oral and Maxillofacial Prosthodontics	60	420	11
5	Periodontology	60	420	10

6	Pediatric and Preventive Dentistry	30	210	5
7	Public Health and Preventive Dentistry	55	385	10
8	Oral Pathology, Microbiology and Forensic Odontology	15	105	2
9	Conservative Dentistry and Endodontics	60	420	11
Total	•	365	2555	61

Total CRRI Credits required: 61

GRADUATION REQUIREMENTS:

A BDS graduate shall be considered to have successfully completed his / her course based on the following criteria:

- Completed all 24 core courses with a minimum score of 50% in summative assessment.
- Completed all 24 core courses with GPA of 5 against a maximum 10 in (summative + formative assessment).
- 3. Completed 9 electives with at least 1 elective in each category with a minimum grade of 5.
- Has a minimum CGPA of 5 computed as per the UGC guidelines for all core and elective courses combined.
- Has accumulated at least 10 Continuing Dental Education non-CGPA course credits over the program duration.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Dental Anatomy, Oral Physiology, Oral Embryology, Dental Histology

Aims and scope of Dental Anatomy, Oral Physiology, Oral Embryology, Dental Histology:

Dental Anatomy and Oral Histology is considered as an art and science of dentistry which deals with the study of development, physiologic functions, anatomy (Functional and Surgical anatomy) Histology of Oral and Paraoral structures which provides a strong foundation to clinical dentistry.

Course Prerequisites

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour/ week/ semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	6	105
Practical/ Clinical	6	250
Total	12	355

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Dental Materials

Aim and Scope of Dental Materials:

Aim of the course is to present basic chemical and physical properties of Dental materials as they are related to its manipulation to give a sound educational background. To understand the evolution and development of the science of dental material. Knowledge of physical and chemical properties. Knowledge of biomechanical requirements of particular restorative procedure. Search for newer and better materials which may answer our requirements with greater satisfaction.

Course Prerequisites

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	4	80
Practical/ Clinical	6	240
Total	10	320

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Dental Materials

Aim and Scope of Dental Materials:

Aim of the course is to present basic chemical and physical properties of Dental materials as they are related to its manipulation to give a sound educational background. To understand the evolution and development of the science of dental material. Knowledge of physical and chemical properties. Knowledge of biomechanical requirements of particular restorative procedure. Search for newer and better materials which may answer our requirements with greater satisfaction.

Course Prerequisites

There is no prerequisite for this course

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	4	80
Practical/ Clinical	6	240
Total	10	320

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Pharmacology

Aim and Scope of Pharmacology:

Pharmacology teaching aims to impart rational therapeutics in the dental students, and should be integrated with clinical and other basic sciences for better comprehension and application. The students will learn about different classes of drugs, their mechanism of action and adverse effects that enable students to prescribe precise drugs for different oral disease manifestations.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Biochemistry
- 2. Human Physiology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credit is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	3.5	70
Practical/ Clinical	0.5	20
Total	4	90

DCI - CBCS Framework for BDS 2022

Course Name: Pre-clinical Prosthodontics

Aim and Scope of Pre-clinical Prosthodontics

The aim of the course is to create an orientation towards clinical prosthodontics by training students through the skills of various important steps in denture fabrication for a partially or a completely edentulous situation. This course also enables the students to master the manipulation of various materials as in practice doing various laboratory works.

Course Prerequisites:

There is no specific course completion requirement for a student to be eligible to enroll in Preclinical Prosthodontics. However, Universities can have additional prerequisites in their curriculum.

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	1.25	25
Practical/ Clinical	7.5	300
Total	8.75	325

DCI - CBCS Framework for BDS 2022 Course (Subject) Name: General Pathology

Aim and Scope of General Pathology

Pathology is the scientific study of disease processes, which result in morphological and functional alterations in cells, tissues and organs that contribute to the practice of dentistry. Provides knowledge and prepares the students to learn about the disease in the following five aspects which includes Etiology, Pathogenesis, Morphological changes, Functional derangements and clinical significance. The subject is mostly concerned in analyzing the clinical abnormalities that are the markers for both normal and abnormal conditions. The student will learn and emphasize interpretation, investigation and management skills in cytopathology, hematopathology and histopathology.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum

- 1. Physiology
- 2. Anatomy

Course credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	2.75	55
Practical/ Clinical	1.38	55
Total	4	110

Course Objectives:

The student should be able to

- 1. Demonstrate and apply basic facts, concepts and theories in the field of pathology
- 2. To recognize and analyze the pathological changes at macroscopic and microscopic levels and explain their observations in terms of disease process
- To demonstrate and understand the capabilities and limitations of morphological pathology in its contribution to dentistry and research
- 4. To integrate knowledge from the basic sciences, such as anatomy and physiology to derive at a diagnosis of various disease conditions in the study of pathology.

Domains:

Knowledge and Understanding: The student demonstrates adequate knowledge of various disease processes including etiology, risk factors and pathogenesis. The student should also demonstrate adequate knowledge of the morphology and microscopy of different disease conditions.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Microbiology

Aim and Scope of Microbiology:

Provides a basic understanding on the virulence of the microbial pathogens in concert with the prevention, diagnosis and control of infections. Microbiology has a huge scope in multiple fields of life sciences with possible careers in teaching, diagnostic and research fields.

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	3.25	65
Practical/ Clinical	1.25	50
Total	(4.5) 5	115

Course Objectives:

The Student should be able to

- 1. Apply the knowledge of aseptic precautions efficiently and effectively and must use appropriate disinfectants during the treatment procedures at the place of work.
- 2. Possess appropriate knowledge on infection and immunity.
- 3. Understand the virulence, pathogenesis, laboratory diagnosis and prophylaxis of bacterial pathogens.
- 4. Understand the theoretical aspects and clinical implication of viruses, fungi and parasites.
- 5. Acquire knowledge on the various prophylactic measures and types of vaccines.

DCI - CBCS Framework for BDS 2022

Course: Second Year- Preclinical Conservative Dentistry and Endodontics

Aim and Scope of Second Year Pre-Clinical Training:

Preclinical operative dentistry is a course designed to help the student to understand the concept of conservative dentistry and be able to identify, diagnose, control, prevent caries and perform restorative procedures in a simulated environment through didactic teaching, discussion, demonstrations and simulated exercises. By repeated exercises on extracted natural teeth and typhodont teeth, the student will obtain proficiency in cavity preparation, application of liners and restorations. They will gain in-depth knowledge about the various materials, instruments and equipment used in tooth preparations.

Course Prerequisite:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

Oral Anatomy

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	1.25	25
Practical/ Clinical	5	200
Total	6.25	225

Course Deployment:

The course shall be deployed as a single module for Preclinical Conservative Dentistry and Endodontics.

Option 1: Single Module				
	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Conservative Dentistry & Endodontics	1.25	5	6.25

Course Objectives:

The Student should be able to

- 1. Understand the concept of conservative dentistry and to be able to identify, diagnose, control, prevent caries and perform restorative procedures.
- 2. Understand the concepts of dental anatomy, histology, occlusion and explain concepts in cariology.
- 3. Explain preliminary considerations in operative dentistry and explain the clinical aspects of direct restorative dental materials.
- 4. Should perform the restorative procedures in a simulated environment through didactic teaching ,discussion, demonstrations and simulated exercises.
- Should identify and study hand and rotary cutting instruments and demonstrate and prepare class I and class II exercises in plaster models, natural teeth and typodont.
- **6.** Understand the concepts of occlusion, contacts and contours and be able to prepare class III, IV, V and MOD exercises.
- Should understand and perform rubber dam isolation and perform basic endodontic exercises.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: General Medicine

Aim and scope of General Medicine

General Medicine is the branch of medicine which is involved in the prevention, diagnosis, and treatment of adult diseases. Enrolled students are familiarized on an advanced level with the field of medical science, through experimentation, observation, theoretical knowledge, and practical exposure.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Physiology
- 2. Biochemistry
- 3. Microbiology
- 4. Pharmacology

Course Credits:

Each theory credit is equivalent to 1 theory hour/ week/ semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	3	60
Practical/ Clinical	2	80
Total	5	140

DCI - CBCS Framework for BDS 2022 Course (Subject) Name: General Surgery

Aim and scope of General Surgery

General Surgery represents the discipline that requires the knowledge and skills of various diseases, which may require surgical expertise. The students get trained to analyze the history and be able to do a thorough physical examination of the patient. The diseases related to head and neck region are to be given due importance, at the same time other relevant surgical problems are also addressed. At the end of one year of study the student has a good theoretical knowledge of various ailments, and is practically trained to differentiate benign and malignant diseases and be able to decide which patient requires further evaluation.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Anatomy
- 2. General Pathology
- 3. Pharmacology

Course Credits:

Each theory credit is equivalent to 1 theory hour/ week/ semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	3	60
Practical/ Clinical	2.25	90
Total	5.25	150

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

Option 1: Single Module				
	Course Name	Didactic Credits	Practical Credits	Total Credits
1	General Surgery	3	2.25	5.25

Course Objectives

At the end of General Surgery course, the student should be able to:

- 1. Comprehend the basic human anatomy and different types of pathologies.
- 2. Comprehend the manifestations of common diseases, their etiology and various treatment options.
- 3. Understand the underlying pathophysiology of each disease and disorder.
- 4. Elicit appropriate history, clinical examination, investigation and diagnosis of various pathologies.
- 5. Understand the underlying biological principles governing treatment of oral diseases.

Domains

1. Knowledge and Understanding: The student should demonstrate adequate knowledge of basic human anatomy, demographics, clinical features, etiology, pathogenesis of different pathological conditions.

DCI - CBCS Framework for BDS 2022 Course (Subject) Name: Oral and Maxillofacial pathology and Microbiology

Aim and scope of Oral and Maxillofacial pathology and Microbiology

Oral and Maxillofacial Pathology represents the confluence of the basic sciences and clinical dentistry. Knowledge in this field is acquired through adoption of methods and disciplines of those sciences basic to dental practice, such as gross and microscopic anatomy, chemistry, microbiology and physiology, and through information obtained by clinical histories and observation of patients. Through the science of oral pathology, an attempt is made to correlate human biology with the signs and symptoms to understand oral disease so that it can be properly diagnosed and adequately treated. It is considered as an art and science of dentistry which deals with the study of pathology and its pathogenesis towards its clinical implications.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Oral Anatomy, Oral Physiology and Tooth morphology
- 2. General Pathology
- 3. Microbiology

Course Credits:

Each theory credit is equivalent to 1 theory hour/ week/ semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	6	120
Practical/ Clinical	2.5	100
Total	8.5	220

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

Option 1: Single Module						
Markey Market and Applications of the	Course Name	Didactic Credits	Practical Credits	Total Credits		
1	Oral and Maxillofacial pathology and Microbiology	6	2.5	8.5		

Course Objectives

At the end of Oral and Maxillofacial pathology and Microbiology course, the student should be able to:

- 1. Comprehend the different types of pathological processes that involve the Orofacial tissues.
- 2. Comprehend the manifestations of common diseases, their diagnosis & clinical correlation with pathological processes.
- 3. Understand the oral manifestations of systemic diseases and correlate with the physical symptoms and signs & laboratory findings.
- 4. Understand the underlying biological principles governing treatment of oral diseases.

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Public Health and Preventive Dentistry

Aim and Scope of Public Health and Preventive Dentistry:

Public Health and Preventive Dentistry is that part of dentistry providing leadership and expertise in population-based dentistry, oral health surveillance, policy development, community-based disease prevention and health promotion. It is unique among the specialties whose practitioners focus on dental and oral health issues in communities and populations rather than individual patients. It is also defined as the science and the art of preventing and controlling disease and promoting dental health through organized community efforts.

Course Prerequisites:

Students should have completed Medical Ethics, Oral pathology and Microbiology to enroll in this course. Universities can have additional prerequisites.

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours. Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	3	60
Practical/ Clinical	5	200

Total	8	260
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Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

	Optio	on 1: Single Mo	dule	
	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Public Health and Preventive Dentistry	3	5	8

Course objectives:

The student should be able to:

- Explain the theoretical aspects and underlying principles of public health, dental public health, preventive dentistry and their relevance to dental profession as a whole
- 2. Discuss the correlation between social determinants and oral health and its importance in tackling the oral health issues at community level and individual level
- 3. Assess the patient/community oral health status using appropriate tools and interpret the data
- 4. Develop relevant treatment and programme planning at individual and community level
- 5. Perform promotive and preventive services at individual and community level
- 6. Outline the basic requirements essential for establishing dental practice

Domains:

Knowledge and Understanding: The student should demonstrate adequate knowledge and understanding of the influence of social determinants and oral health, available tools

DCI - CBCS Framework for BDS 2022

Course Name: Oral Medicine and Radiology

Aim and Scope of Oral Medicine and Radiology

Knowledge, training, and development in the art and science of Oral Medicine and Radiology. The subject aims to prepare students in the diagnosis of oral mucosal lesions, Orofacial pain, salivary gland disorders, and bone diseases. The students will learn the normal appearance of the mucosa, identify the pathologies, medical management of Orofacial diseases and learn the science of planning treatment for medically complex patients. The student also learns about the different imaging modalities in the Orofacial region, art of exposing radiographs and the skill of interpreting and reporting the radiographs.

Course Prerequisites:

Candidates should have completed the following major competencies enlisted under each level. Universities can have additional prerequisites in their curriculum.

- 1. Oral Anatomy & Histology
- 2. Pharmacology
- Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist, act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	4	80
Practical/Clinical	4	160
Total	8	240

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

Option 1: Single Module					
	Course Name	Didactic Credits	Practical Credits	Total Credits	
1	Oral Medicine and Radiology	4	4	8	

	Option 2: 2 Modules		
Course Name	Didactic Credits	Practical Credits	Total Credits

DCI - CBCS Framework for BDS 2022

Course Name: Periodontology

Aim and Scope of Periodontology:

Knowledge and training and development in the art and science of Periodontology aims to prepare students in the maintenance of the health, function, comfort and esthetics of all the tissues and supporting structures in the mouth. The students will learn about the growth and development of the periodontal tissues, the identification of health and disease in the periodontium and the management of periodontal conditions by instituting therapy to preserve, improve and maintain the natural dentition, dental implants, the periodontium and peri-implant tissues with the objective of achieving health, comfort, esthetics and function.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

1. Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours. Universities shall have the freedom to increase the credits based on needs in their curriculum but the total credits cannot be lesser than that prescribed by the DCI.

	Credits	Hours
Theory	4	80
Practical/ Clinical	4.25	170
Total	9	250

Course Deployment:

The course shall be deployed as a single module for Periodontology.

Single Module					
	Course Name	Didactic Credits	Practical Credits	Total Credits	
1	Periodontology	4	4.25	9	

Course Objectives

The student should be able to

- 1. Perform a comprehensive periodontal evaluation of all teeth and peri-implant tissues through intraoral examination and also detect non-periodontal oral diseases and conditions through intraoral and extraoral examination
- 2. Gather clinical findings and establish a diagnosis, prognosis and treatment plan
- 3. Be proficient in patient education, training in oral hygiene, mitigation of risk factors and manage periodontal systemic inter-relationships when appropriate

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Oral and Maxillofacial Surgery

Aim and Scope of Oral and Maxillofacial Surgery:

Oral and maxillofacial surgery is the specialty of dentistry that deals with the diagnosis and surgical and adjunctive treatment of diseases, injuries and defects, including both the functional and esthetic aspects of hard and soft tissues of oral and maxillofacial region. The students will learn about the methods for asepsis and cross-infection control, various techniques of local anesthesia to deliver painless treatment, management of medical emergencies in dental clinic, techniques of exodontia, suturing techniques, minor and major surgical procedures of oral and maxillofacial region.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

1. Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours .
Theory	3.5	70
Practical/ Clinical	6.75	270
Total	11	340

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

Option 1: Single Module					
	Course Name	Didactic Credits	Practical Credits	Total Credits	
1	Oral and Maxillofacial Surgery	3.5	6.75	11	

Ор	tion 2: 2 Modul	es	
Course Name	Didactic Credits	Practical Credits	Total Credits
Oral and Maxillofacial Surgery	3.0	5.0	8.0
Local Anesthesia	1	2	3.0
	Oral and Maxillofacial Surgery Local	Course Name Didactic Credits Oral and Maxillofacial Surgery Local 1	Oral and Maxillofacial Surgery Local 1 2

DCI - CBCS Framework for BDS 2022

Course: Final Year

Name: Conservative Dentistry and Endodontics

Aim and Scope of Conservative dentistry and Endodontics

Conservative dentistry is the art and science of the diagnosis ,treatment and prognosis of the defects of teeth that do not require full coverage restorations for correction. Such treatment should result in the restoration of proper tooth form, function and esthetics while maintaining the physiologic integrity of the teeth in harmonious relationship with the adjacent hard and soft tissues, all of which should enhance the general health and welfare of the patient (Adapted from Sturdevant)

Endodontics is the branch of dentistry which is concerned with the morphology, physiology and pathology of the human dental pulp and periradicular tissues. Its study and practice encompass the basic clinical sciences including biology of the normal pulp, the etiology, diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions. (Adapted from Guide to clinical endodontics By AAE)

Course Prerequisites

Candidates should have completed the following courses to be eligible to take up this course.

- 1. Preclinical Conservative Dentistry and Endodontics. Universities can have additional prerequisites in their curriculum.
- 2. Dental Materials
- 3. Oral pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	6	110
Practical/ Clinical	9	370
Total	15	480

Course Deployment

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

	C	ption 1: Single Mod	ule	
	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Conservative Dentistry & Endodontics	6	9	15

	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Conservative Dentistry	3	6	9
2	Endodontics	3	3	6

Course Objectives

The Student should be able to

- 1. Understand the theoretical aspects of prevention and management of dental caries, various types of restorations to get proper form, function, improvement of esthetics & occlusal corrections. To manage of pulpal and periapical diseases
- 2. Diagnose and plan the treatment in conservative dentistry & endodontics

DCI - CBCS Framework for BDS 2022

Course (Subject) Name: Orthodontics and Dentofacial Orthopedics

Aim and Scope of Orthodontics and Dentofacial Orthopedics:

Orthodontics and dentofacial orthopedics is a dental speciality that includes diagnosis, prevention, interception and correction of malocclusion, as well as neuromuscular and skeletal abnormalities of developing or mature orofacial structures.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- Dental Anatomy
- 2. Dental Materials
- 3. Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	2.5	50
Practical/ Clinical	4.5	180

Total	7	230

Course Deployment:

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

	C	ption 1: Single Mod	ule	
	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Orthodontics Dentofacial Orthopedics	2.5	4.5	7

	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Orthodontics Dentofacial Orthopedics	2.5	3	5.5
2	Preclinical Orthodontics	0	1.5	1.5

Course Objectives:

The Student should be able to

- 1. Understand the theoretical aspects of Preventive, Interceptive, Corrective and Surgical Orthodontics
- 2. Understand and plan for the basic principles of Retention and Relapse
- 3. Understand the Biology of tooth movement and basic Biomechanics involved in moving the teeth using Removable appliances.
- 4. Understand the theoretical aspects and clinical implication of Growth and Development of Head, face and the Jaws.
- 5. Diagnose and plan treatment for Removable and fixed Orthodontic patients

DCI - CBCS Framework for BDS 2022

Course Name: Oral and Maxillofacial Prosthodontics

Aim and Scope of Oral and Maxillofacial Prosthodontics:

Prosthodontics is considered as an art and science of dentistry which deals with the restoration and/or replacement of dental/oral and/or associated tissues to optimal function, comfort and esthetics using artificial biocompatible substitutes [Adapted from ADA 2018]

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum.

- 1. Preclinical Prosthodontics
- 2. Dental Materials
- 3. Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	5.5	110
Practical/ Clinical	9.25	370
Total	15	480

DCI - CBCS Framework for BDS 2022 Course Name: Pediatric and Preventive Dentistry

Aim and Scope of Pediatric and Preventive Dentistry:

Pediatric and Preventive Dentistry aims to prepare students for comprehensive, preventive, and therapeutic oral health care for infants and children through adolescence including those with special health care needs. The students learn about growth and development, identification, and management of commonly occurring oral diseases and the need to instill good oral health practices and positive attitude in a child. The students are trained in behaviour management methods and to perform simple treatment procedures for the child. The students also observe complex procedures such as oral rehabilitation being performed under both conscious sedation and general anaesthesia.

Course Prerequisites:

Candidates should have completed the following courses to be eligible to take up this course. Universities can have additional prerequisites in their curriculum

- 1. Human anatomy
- 2. Human physiology
- 3. Biochemistry, nutrition and dietetics
- 4. Dental Anatomy, Embryology, and oral histology
- Dental Materials
- 6. Preclinical Conservative dentistry and Endodontics
- 7. Oral Pathology

Course Credits:

Each theory credit is equivalent to 1 theory hour / week / semester; each practical credit is equivalent to 2 practical hours per week per semester. According to Dentist act 1948 dental schools should work for 240 working days and this computes to 20 weeks per semester inclusive of the exam duration. Therefore, as per regulations, 1 dental theory credit is equivalent to 20 lecture hours and 1 dental practical credits is equivalent to 40 practical/ clinical hours.

	Credits	Hours
Theory	3.25	65

Practical/ Clinical	4.25	170
Total	7.5	235

Course Deployment:

The course shall be deployed as a single module for Pediatric Dentistry

Universities can choose to train their students using the following modules and/or design additional core / elective modules without reducing the minimum required total credits.

	Course Name	Didactic Credits	Practical Credits	Total Credits
1	Pediatric and Preventive Dentistry	3.25	4.25	7.5

Course Objectives

The student should be able to

- 1. Assess craniofacial and general growth and development of the child.
- Diagnose clinical manifestations of common oral diseases affecting teeth and supporting tissues of children from infancy through adolescence including those with special health care needs.
- 3. Categorize instruments and techniques used in various procedures for oral rehabilitation.
- 4. Justify the best treatment option and deliver it in the most efficient manner based on evidence based dental practices.
- 5. Analyze the behavior of children both in clinical setup and otherwise, to inculcate positive dental attitude in them.
- 6. Deliver effective comprehensive, preventive, and therapeutic pediatric dental treatment.

Domains

Knowledge and Understanding:

The learner should possess adequate knowledge to

- The Universities should set a minimum requirement for formative not less than
 35% for students to be eligible to appear for the summative exam.
- The formative and summative evaluation guidelines for elective courses are to be designed by the university. Only the final grade of the elective courses shall be entered in the mark sheet.

UGC Guidelines for calculation of CGPA

The UGC recommends the following procedure to compute the Cumulative Grade Point Average (CGPA):

The CGPA is calculated by taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

CGPA = Σ (G x C) / Σ C where G is the GPA of a course and C is the total number of CGPA credits in the program .

Weighted grade = GPA of a subject x Credits Allotted for that subject.

E.g.: If a student secures a 7.80 GPA in Anatomy (Subject with 9 credits) then the weighted grade will be $7.8 \times 9 = 70.2$.

CGPA = Sum of the weighted grades of all core and elective Courses (subjects) / Total Credits of core and elective Courses (subjects).

CRRI and non CGPA credits shall **not** be included in the CGPA calculation. So the total credits of the program should not be less than = 173 core + 18 elective + 6 Comprehensive scredits = 197 credits. If a university introduces more core or elective

course requirements, then the denominator will increase to include the newly added course credits. The CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

COURSE PROGRESSION

In a CBCS system a student can choose the order in which they can pursue a course within the program based on their individual capacity and personal factors. However, it would be illogical for a student to select advanced subjects/ courses before establishing a sound knowledge in basic fundamental subjects/ courses. For example, Preclinical prosthodontics should be completed as a prerequisite for a student to be eligible to take up the course on prosthodontics. Therefore each course has been mapped to their respective prerequisite requirements to make a student eligible to undertake a particular course.