

SYLLABUS
Ability Enhancement Compulsory Course
(All Undergraduate Degree Programmes under Gauhati University)
ENV -AE -2014: Environmental Studies
Total marks: 100 (External: 80 + Internal: 20)
Nature of Course: AECC

No. of Credits: 4

No. of hours: 60

(Approved in the Academic Council 08-11-2019)

Unit1: Introduction to Environmental Studies

- Multidisciplinary nature of environmental studies;
- Scope and importance;
- Concept of sustainable development

(3 lectures)

Unit 2: Ecosystems

- What is an ecosystem? Structure and function of ecosystem: Energy flow in an ecosystem: food chains, food web and ecological succession. Case studies of the following ecosystems:
 - a) Forest ecosystem
 - b) Grassland ecosystem
 - c) Aquatic ecosystems (ponds, streams, lakes, rivers)
 - d) Mountain ecosystem

(8 lectures)

Unit 3: Natural Resources: Types, Renewable and Non-renewable Resources

- Land resources : landuse change; land degradation, soil erosion and desertification
- Forest resources: Deforestation: Causes and impacts due to mining, Construction of big dams and their effects on forests and people.
- Water resources: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state: Indo-China, Indo-Bangladesh, Cauveri disputes) .
- Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies – coal mining, crude oil extraction.

(8 lectures)

Unit 4: Biodiversity and Conservation

- Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity: Habitat loss, poaching of wildlife, man- wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex situ conservation of biodiversity.
- Ecosystem and diversity services: Ecological, economic, social, ethical, aesthetic and informational value.

(8 lectures)

Unit 5: Environmental Pollution

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste.
- Pollution case studies – Bharalu river, Deepor Beel, Kolong river

(8 lectures)

Unit 6: Environmental Policies & Practices

- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements, policies and treaties; Montreal and Kyoto protocols and Convention on Biological Diversity (CBD), CITES.
- Nature reserves, tribal populations and rights, and human wildlife conflicts in the context of Assam

(8 lectures)

Unit 7: Human Communities and the Environment

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management: floods, earthquake, cyclones and landslides
- Environmental movements: Chipko, Silent valley, Narmada Bachao, Bishnois of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (CNG, electric vehicles, green energy, waste minimization)

(9 lectures)

Unit 8: Field work

- Visit to an area to document environmental assets : river/forest/flora/fauna, etc
- Visit to a local polluted site - Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems- pond, river, stream

(Equivalent to 8 lectures)

Suggested Readings:

1. Bharucha Erach : Text book on Environmental Studies, UGC, New Delhi
2. Carson, R 2002. Silent Spring. Houghton Mifflin Harcourt.
3. De A.K.: Environmental Chemistry, Wiley Eastern Ltd.
4. Kaushik Anubha and C.P.Kaushik : Perspective in Environmental Studies, New Age International
5. Rajagopalan, R. (2018). Environmental Studies. (3rd Edition) Oxford University Press
6. S. C. Santra (2011): Environmental Science, New Central Book Agency

GAUHATI UNIVERSITY
Approved in the meeting of the Academic Council

**Regulation of TDC(B.A./B.Sc.) for Semester System
& with Choice based Credit and Grading System.**

1. A TDC shall be of Six Semesters covering three Calendar Years. The schedule for Semester system shall be as shown below :
 - (a) First, Third and Fifth Semester : July 16---December 31
(including examinations)
 - (b) Second, Fourth and Sixth Semester : January 1— June -15
(including examinations)
 - (c) Semester Break : June 16---- July 15.

The Academic Calendar and schedule for Semester System is given in Annexure—I. Course Structure under Semester System given in Annexure—II.
2. Students performance should be monitored throughout the Semester by continuous assessment in the theory and practical courses. Evaluation of the Students performance in each of the theory paper will be based on the following:

Internal Evaluation	: 20% Marks
External Evaluation	: 80% Marks
3. Internal Evaluation should be based on two sessional examinations, home assignments, Seminars, and library work in each Semester. The schedule for internal evaluation is given in Annexure-I. The procedure for internal evaluation is given in Annexure-III.
4. External Evaluation should be through a final examination at the end on the Semester. The procedure for external evaluation is given in Annexure—IV.
5. The pass marks in each theory paper is 30 % and that in each practical paper is 40%.
6. In each paper, students must secure pass mark in combined total of internal and external evaluation.
7. A student who could not appear or fails in any Semester examination will be allowed to clear the same as follows:
 - (a) First Semester with the regular Third Semester examination.
 - (b) Second Semester with the regular Fourth Semester examination.
 - (c) Third semester with regular Fifth Semester examination.
8. A student may be allowed to “repeat” any one of the Major theory papers in the First, Second, Third Semester.
9. No “repeat” shall be allowed in 4th, 5th and 6th Semester.
10. A student must pass all his Semester examinations, within five years from the date of admission to the First Semester course. A student will get a maximum of three chances to clear a particular Semester.
11. In case of any dispute regarding evaluation or unforeseen events the matter may be placed in the Committee of Courses and Studies (U.G) for amicable settlement.
12. Since the Semesters involve continuous assessment there would be no scope for a student to appear as a private/ non collegiate candidate in any subject.
13. No college transfer of students be allowed except in case of parents service transfer.
14. For any matter not covered under this Regulation for semester System the existing University Rules and the Gauhati University Act 1949 (as amended till date) should be applicable.

Annexure --- I
Academic Calender and Shedule for Semester System

- | | |
|--|--------------------------------|
| (A) Admissions | - July 16 |
| (B) Semester I/III/V Classes | - July 16 - December |
| Sessional Examination 1 | - September |
| Sessional Examination 2 | - November |
| End Semester Examination | - December |
| (including preparation for examination | |
| Announcement of Results | - by 15 th February |
| (C) Semester Break | - June 16—July 15 |

(D)	Semester II/IV/VI Classes	- Jan — June
	Sessional Examination 1	- February
	Sessional Examination 2	- April
	End Semester Examination	- To be completed by June -15
	(including preparation for examination)	
	Announcement of Results	- First week of August

Note : The exact date of the sessional examinations shall be fixed by the concerned teachers/colleges and that of the final semester examination by the C.E.,G.U. The Controller of Examinations would announce the results of the final examinations. Admissions will be given by following University Rules.

Annexure ---II **Syllabus and Course Structure under Semester System**

1. The Syllabus for each paper should be divided into modules or units. Each unit should be assigned marks (Preferably equal marks for each unit) so that the question paper of the final semester examination cover the entire syllabus.
2. The minimum total marks in a under graduate course should be (preferably) in between 2400-3000. Due to different nature of subjects, with practical or otherwise, the individual stream may make the final decision regarding the total marks.
3. In the Sixth semester there must be at least one paper where the students are given the opportunity to apply their knowledge. The course may be so designed that students creativity is encouraged. This could be a small academic project', an advanced level practical work including literature survey on a topic , field/survey work or any other work which may induce creativity among the students.

The students must submit two copies of the Project Work prepared in the format of a Ph.D. or M.Phil.thesis. The student will have to defend the work before a board of External and Internal examiners comprising of three teachers including the supervisor/ guide. Practical examinations shall be conducted by one external examiner and one internal examiner.

Annexure ---III **Procedure for Internal Evaluation**

1. The marks allotted for internal evaluation (20%) in each theory paper will be based on the following :
 - (a) Sessional Examination I
 - (b) Sessional Examination II
 - (c) Home Assignment, Seminars, Field reports, quizzes and Group Discussion or related work depending on the decision of the teachers/college concerned. Home assignment etc. (as in (c) above) may be given to the students at any time during the semester. These may be regarded as one question (out of four) in each of the sessional examination and marked accordingly. Thus (c) above is a part of the sessional examinations and the total internal marks in a-c above would be 20% of the marks allotted to the paper.
2. Each sessional examination of theory Paper will be of one hour duration and be conducted by the concerned teacher of each paper. The setting of question paper, invigilation duty, evaluation of answer scripts for each paper will be done by the concerned teacher(s) as a part of his/her normal duty.
3. The teacher concerned will fix the exact date of the sessional examination in each paper following the guidelines of academic schedule (Annexure-I) . Each sessional examination will be of one hour duration and the students should write the examination in University answer Scripts.
4. After evaluation the answer scripts should be shown to the students and corrections should be made if there are any. After this, the answer scripts should be collected back from the students. The entire process of evaluation of a sessional examination should not take more than two weeks from the date of examination.
5. There is no provision for re-appearing or “repeat”/ “betterment” in the sessional examination. If a student miss one or both examination for valid reasons (as evidenced by medical certificate or other authentic documents) then the teacher of the college concerned may allow the student a separate examinations using the teachers own discretion.
6. If a paper is taught by more than one teacher then the concerned teachers should co-operate in conducting the internal evaluation. Each sessional examination for a particular paper should be one examination of one hour duration even if several teachers may teach the paper. However, since the contents of a paper in a semester examination is approximately half that of a full paper in annual examination, it is strongly recommended that one paper in a semester system be taught by only one teacher.
7. At the end of the semester and before the final semester examination begin, the concerned teacher(s) must submit the internal marks in University mark sheets along with the answer scripts to the C.E., G.U.
8. The affiliated colleges should submit the internal evaluation mark sheets and the answer scripts directly to the Controller of Examinations.
9. Scrutiny of the answer scripts and scaling of the internal marks may be arranged by the Controller of Examinations if necessary.
10. Theory/ Practical papers in External/Internal examinations are in numerical scores.

Annexure ---IV **Procedure for external evaluation**

1. The Controller of Examinations would make the necessary arrangement for announcing the date of examinations and other necessary procedures as per University Rules.
2. Each theory paper will have 80%, 60% & 40% of the total marks for external evaluation. The end semester theory examination will be of three hours, two and half hours and two hours durations respectively.
3. The affiliated colleges should send the answer scripts of the external examinations to the zonal officers as per direction of the C.E., G.U.
4. The evaluation zone will arrange for evaluation and scrutiny of the final examination answer scripts. After evaluation and scrutiny the answer script should be sent to the Controller of Examinations..
5. The Controller of Examinations would make necessary arrangement for announcing the results as per Academic Calendar (Appendix I)
6. For any procedure not mentioned above, the existing University Regulations for P.G. Examinations would be applicable.

“CREDIT & GRADING”

1. Definition of Credit :

(a) The theory paper would have one credit for each hour of instruction per week in a semester. The activities include lectures, tutorials and others for internal evaluation (Seminar, group discussion, laboratory/demonstration session mini project etc.)

A theory paper (which is equivalent to 100 marks of course load) should be of 6 (six) credit points which would consist of 4 hrs. of lectures and 2 hrs of tutorial & other activities. A theory paper of 50 marks would have 3 (three) credit points: 2 hrs of lectures + 1 hrs tutorial (& others)

For science subjects with practical one hour tutorial may be outside the office hours for home work, literature survey/internet browsing etc.

- (b) Practical papers / courses would have one credit point for every 2 hrs of laboratory work per week in a semester. If the number of hrs per week is an odd number, appropriate adjustment be made it to the nearest even number for example.
- 1) 3 hrs lab per day x 2 days per week = 6 hrs = 3 credits
 - 2) 3 hrs lab per day x 3 days per week = 9 hrs = 4 credits
 - 3) 3 hrs lab per day x 6 days per week = 18 hrs = 9 credits.

If the total number of practical courses is 18 hrs per week, then 3 hrs per week be devoted as home work for preparing the report (i.e. lab book) and other activity related to practical.

- (c) P.G. Dissertation by research work /projects would be of 12 credit points by 24 hrs of work per week in a semester. The dissertation would involve activities such as literature survey preparation of project report, computation, seminar, presentation, demonstrations, viva-voce examinations, and (if required) visit to other institutions or research lab for data collection etc. About six to nine hrs of work may be allowed to such activities outside class hours and about 18 to 15 hrs of work for the laboratory work.
- (d) Other type of work such as departmental seminar, field/industrial training would be compulsory for the student, but no credit or marks for internal evaluation be assigned for such activities. Moreover, class attendance should not be considered for internal (or external) evaluation. Attendance including of department seminars would be treated under the University rules of minimum 75% attendance required for appearing in the examinations.

2. Total Credit per semester:

Every student must complete a minimum of 30 credits per week in a semester, this amounts to about 30 hrs of contacts teaching per week. The total number of credit for a four semester course should be between 120-140. For a two semester or a eight-semester course the total credit points may be worked out accordingly.

3. Core Course and Elective courses:

- (a) Core courses are compulsory set of papers which also include those offered for specialization in each branch of the subject. For example, the set of papers (theory & practical) offered under specialization in physical chemistry would be considered under core course for the concerned student of physical chemistry. The total credit assigned for the core courses would be not more that 80% of the total credit (viz.96 credits out of 120 total credits).
- (b) Elective Courses: The essence of the credit system is the freedom of choice given to the students for opting for courses /papers within and outside the department. Moreover, student's mobility from one institution to another be encouraged by a credit transfer mechanism. However, the total credit points thus earned by opting for elective courses should be a minimum of 20% of total credit (viz. 24 credits out of total of 120 credits).
- (i)Students counseling by the teachers is a must to guide the students to opt for elective courses those are relevant to the concerned subject in which the student is registered for a degree.
 - (ii)The students may be allowed to complete the elective course at their own pace. For example, a student who wishes to opt for a course or do his /her Dissertation /Research work in another institution, may be allowed to do so after completing other requirements in the parent institution.
 - (iii)Good students may be allowed to take extra load (over specified minimum 24 credits) in electives. The grade sheet/ Transcripts would the extra papers as Audit Course, but the grades obtained by the students would not be used for the calculation of GPA and CPI.

SUGGESTED EXAMPLES :

- (1) One Semester Course load (Semester I to III) for a subject without practical (Arts, Commerce, Law, Mathematics etc.)

Paper No.	Type of Paper	Name of hrs / week			No. of Credits
		Lecture (hrs)	Tutorial (hrs)	Total contact hrs	
1	Theory-1	4	2	6	6
2	Theory-2	4	2	6	6
3	Theory-3	4	2	6	6
4	Theory-4	4	2	6	6
5	Theory-5	4	2	6	6
	Total-	20	10	30 hrs	30 Credits

- (2) One Semester Course load (Semester I to III) for a subject with practical.

Paper No,	Type of Paper	No of hrs / week				No. of Credits
		Lecture (hrs) L	Tutorial (hrs)T	Home work	Total contact hrs (L+T)	
1	Theory-1	4	1	1	5	6
2	Theory-2	4	1	1	5	6
3	Theory-3	4	1	1	5	6
4	Theory-4	2	0	1	2	3
5	Theory-5	1	15	3	15	9
	Total-				32 hrs.	30 Credits

- (3) Suggested 4th Semester Course load : Either (1) / (2) above or as follows:

Paper I-III Three theory papers – 3x6 credit = 18 credits

Paper –IV P.G. Dissertation / Project

By Research-

= 12 credits

Total = 30 credits



4. Grading System :

- (a) Conversion of marks to Grades :

Actual marks secured by a group of candidates are converted into Relative Percentile (R) before conversion into Relative Letter Grades. The maximum Actual marks (i.e. Highest mark) (M) secured in a particular Group is converted into 100% and other actual marks (A) secured by the students of the same groups are converted to the Relative Percentile.

$R = (100 / M) \times A$, where R= Relative Percentile

M= Maximum (Highest) marks in the class

A= Actual marks of a student who passed i.e. if the actual marks is not less than 30%

- (b) Conversion Table for Relative Percentile into Letter Grades and Grade points.

Range of Relative Percentile	Letter Grades	Grade point
90-100	A	10
75-89	B	8
55-74	C	6
40-54	D	4
30-39	E	2
If A / or F is below 30 % in theory & 40% in practical.	F	0

- (C) Conversion of Grades of CGPA & CPI :

Grade point average (GPA) is used as a numerical survey of academic achievement, First, Grades are assigned to points in a 10 points scale as follows:

A= 10 points, B= 8 points, C= 6 points, D= 4 points, E= 2 points, F=0 points.

Secondly, the hours of credit for each course are multiplied by the Grade point value to determine the honour points. The honour points are then added for all the courses / papers in a Semester. The same of honour points in a given semester is then divided by the total number of credits.

Example :

Course No.	Course/ Paper	Credit	Grade	Point	Honour Point
Chem-401		12	A	10	120
Chem-401		12	B	8	96
Chem-420		12	C	6	72
Chem-60X		8	D	4	32

Chem-430	Laboratory work	16	A	10	160
	Total	60			480

Grade point average (GPA) = $480 / 60 = 8.0$

Cumulative Performance Index (CPI) :

The final result of a four Semester Course is expressed as the average Grade points obtained by the student in the entire course :

$$\text{CPI} = \frac{\text{GPA of Sem-I} + \text{GPA of Sem-II} + \text{GPA of Sem-III} + \text{GPA of Sem-IV} + \text{GPA of Sem-V} + \text{GPA of Sem-VI}}{6}$$

(d) Conversion Formula : for m Grades to P.C. of marks for Humanities and Social Science:

For CGPA up to 9.5 : $(5 \times \text{CGPA}) + 20$
 For CGPA above 7.95 : $(65 \times \text{CGPA}) - 550$
 So, for class-I minimum CGPA be 8
 For class –II minimum CGPA be 5

For other subjects / disciplines :
 For CGPA upto 9.00 : $(10 \times \text{CGPA}) - 5$
 For CGPA above 9.00 : $(15 \times \text{CGPA}) - 50$

In order to qualify for a P.G. degree a student must secure CGPA of minimum 5.0 (equivalent to 45% marks).

Note :

- (1) There will not be any limit regarding the number of failed papers for enrolling in the next higher semester class.
- (2) A candidates who fails to clear certain papers in a particular semester she/he may be allowed to repeat papers in the next opportunity. For repeating a course a student should attend all the classes and complete internal and external examinations.
- (3) However, in order not to overload the students with courses, a student shall not be allowed to register for courses not more than 34 credits in a semester. If there is clash in the routine, she/he should repeat previous semester courses first and then opt for remaining paper(s) in the next opportunity or after completion of the semester.

5. Examination and Evaluation :

- (1) The pass marks in each paper is 30 % of total marks in that paper (external + internal)
- (2) A student who fails in one or more papers should repeat the papers by attending all the classes and by appearing for internal as well as external examinations at the next opportunity. A student shall get three chances for clearing the papers within five years from the date of admission to the degree programme.
- (3) A student who has completed a semester may be allowed to proceed to the next semester irrespective of number of papers where the student failed.
- (4) In order to complete a course a student must obtain pass marks in all the papers in the semesters offered to the student in the degree course (PG or UG).
- (5) A student who fails in elective papers may be allowed to replace them by other elective papers of the same credit after obtaining prior approval from the department. For this the procedure for repeating (as in (2) above) would be applicable.
- (6) Students who secure the lowest grade (viz. E grade) may be given the option to repeat that paper by following the procedure for repeating (as in (2) above)
- (7) Internal Evaluation: the following guidelines be followed.
 - (i) For every theory paper there should be a separate internal evaluation conducted by the teachers involved in teaching that paper.
 - (ii) Each teacher involved in teaching a paper would conduct a one- hour written examination of (16-20% marks) some time in the middle of the of the semester. If seminars or group discussions are held as a part of internal evaluation, then each student should submit a report, which may be assigned about 4% marks (within 20%) in internal evaluation.
 - (iii) The mid semester examination answer scripts (with marking) should be shown to the student so that they are aware of the progress made by them in the course.
 - (iv) Attendance in class should not be considered for internal evaluation.

Regulations:

- (1) There will be six semester covering 03 years.
- (2) More weightage is given to internal assessment.

Internal assessment/ evaluation = 20%
 External (end semester) evaluation = 80%

- (3) There shall be atleast one sessional exam in each semester.
 (4) There is provision for clearance of absent or failed papers.
 (5) There is provision for "Repeat" of any one of Major papers in 1st, 2nd & 3rd Semester,

Syllabus

(a) Major

Sem	Course	Total Marks	Credit	Total cr
1 st	Major	200	16	32
	1 st Subsidiary	75	6	
	2 nd Subsidiary	75	6	
	English-I	50	4	
2 nd	Major	200	16	32
	1 st Subsidiary	75	6	
	2 nd Subsidiary	75	6	
	English-II	50	4	
3 rd	Major	200	16	36
	1 st Subsidiary	100	8	
	2 nd Subsidiary	100	8	
	Env. Study-I	50	4	
4 th	Major	200	16	36
	1 st Subsidiary	100	8	
	2 nd Subsidiary	100	8	
	Env. Study-II	50	4	
5 th	Major	450		36
6 th	Major	450		36

Grand Total = 2600 marks. Credit= 208

(b) General

1 st	1 st Elective	75	6	22
	2 nd Elective	75	6	
	3 rd Elective	75	6	
	English-I	50	4	
2 nd	1 st Elective	75	6	22
	2 nd Elective	75	6	
	3 rd Elective	75	6	
	English-II	50	4	
3 rd	1 st Elective	100	8	28
	2 nd Elective	100	8	
	3 rd Elective	100	8	
	Env. Sc.-I	50	4	
4 th	1 st Elective	100	8	28
	2 nd Elective	100	8	
	3 rd Elective	100	8	
	Env. Sc.-II	50	4	
5 th	1 st Elective	200	16	

	2 nd Elective	200	16	32
6 th	1 st Elective	200	16	
	2 nd Elective	200	16	32

Grade Total= 2050

Credit= 164

In the six semester there must be at least one paper where the students are given opportunity to apply their knowledge. The Course may be designed that students' creativity is encouraged. This could be a small academic project, an advanced level practical work, literary survey on a topic, field/survey work or any other work which may induce creativity among the child.

Evaluation/ Examination

- (1) Examination work shall be compulsory for all teachers.
- (2) The teachers concerned have been entrusted for internal evaluation.
- (3) The detail guideline for internal evaluation have been given.
- (4) There shall be cluster of Colleges as evaluation Zones and all the major Colleges will have evaluation Zones.
- (5) The Principles of the Colleges shall be responsible for timely evaluation of answer scripts.
- (6) The existing spot evaluation system will continue.

REGULATIONS OF THE UNDER GRADUATE CHOICE BASED CREDIT SYSTEM (UGCBCS) GAUHATI UNIVERSITY, 2019

(AS AMENDED ON 8/11/2019)

1. THE CHOICE BASED CREDIT SYSTEM (CBCS)

The Choice Based Credit System is the logical next step in a credit based semester system becoming more learner-centric. A CBCS offers the student a diversity of courses to choose from and the autonomy to decide on the place, pace and time of learning. The UGC has recommended that it is desirable for all institutions of Higher Education in the country to move to a CBCS and, together with it, implement a uniform grading system.

2. UNDER GRADUATE CBCS (UGCBCS) PROGRAMMES

The undergraduate degree programme in the CBCS will have courses spread across six- semesters. A typical semester will comprise a minimum of 15 to 18 weeks of academic work that will translate into 90 actual teaching days. Two consecutive (one odd and one even) semesters will make up an academic year. An UG course shall be of Six Semesters covering three Calendar Years (Academic Sessions – June to May). The duration of the Odd Semesters (First, Third and Fifth) shall be ‘June to November’, and that of Even Semesters (Second, Fourth and Sixth) shall be ‘December to May’.

The dates and duration mentioned in the academic calendar concerned will be in consonance with the above schedule as far as practicable.

Each student must take admission in three consecutive Academic Sessions starting with the first semester. Students who do not enroll in the Second Academic Session will not be eligible to take admission in the Third Academic Session.

The minimum time requirement to acquire an undergraduate degree will be three years. The maximum time allowed to complete the programme will be six years.

Structure of courses and credits of the UGCBCS programmes:

2.1 The term undergraduate degree programme denotes programmes like B.A., B.Sc., B.Com., B.Voc, BCA, BBA and all other such programmes where the requirement for award of a degree is the successful progression of the student through six semesters of academic work.

2.2 The academic work in each semester will require the student to engage with chosen courses, the content of which will be described in detail in the syllabi. Every course will have defined learning objectives and may be designed to comprise lectures, tutorials, laboratory work, field work, project work or any other activity that addresses the learning objectives of the course.

2.3 Each course will have credits, assigned on the basis of course related activities, which a student will earn through satisfactory fulfillment of the academic requirement of the course.

2.4 An undergraduate degree program with Honours in a discipline will have a course credit requirement of 148 credits while an undergraduate degree program without Honours will require a student to earn 132 course credits. Students in a Honours program can opt to earn additional credits by undertaking additional Elective courses subject to the condition that the total number of course credits does not exceed 160 credits. For a student in a Regular program, this credit ceiling will be 140 credits. The credits earned beyond the mandatory program requirement will not be taken into consideration in computation of the student's grade but will be recorded in the grade sheet.

Note: Wherever the University requires that an applicant for a particular M.A./M.Sc./Technical/Professional course should have studied a specific discipline at the undergraduate level, then obtaining 24 credits in the concerned discipline at the undergraduate level may be deemed sufficient to satisfy such a requirement for admission to the M.A./M.Sc./Technical/Professional course

2.5 The medium of instruction and examination will be English and/or Assamese, except in language courses.

3. INTRA AND INTER-INSTITUTIONAL TRANSFER OF CREDITS

3.1 The UGCBCS requires mandatory Generic Elective Courses which involves intra-institutional (inter-departmental movement). However, at the operational level, colleges are expected to face constraints in teaching, spatial and physical infrastructure. Hence, initially, colleges may offer limited intra institutional mobility in the form of restricted combination of courses.

3.2 Inter Institutional mobility may not be possible in the same semester. However, a student can access off campus courses online in the **SWAYAM** platform, if and when, they are endorsed and adopted by Gauhati University. In that case, credit and grade point earned will be transferred and reflected in the Grade Sheet.

3.3 Gauhati University may allow a student to migrate, along with the credit earned, to another affiliated college/a different university in a particular semester of a UG programme, but only after completion of the previous semester. Similarly, it may allow students of other universities to in-migrate, with their credit and grade points earned, to any under- graduate programme of the university, provided they have completed the previous semester.

4. NATURE AND NOMENCLATURE OF COURSES:

In line with the UGC's guidelines, the courses are categorized as Core courses, Elective courses or Ability Enhancement courses

4.1 **Core Course.** A Core course is a course that has to be compulsorily studied. A student in an undergraduate degree programme with Honours will have to take up 14 core courses, each of 6 credits. In a Regular undergraduate degree programme a student will need to take up 12 core courses, each again of 6 credits.

4.2 **Elective Course:** An Elective course is to be chosen by the student from a pool of such courses on offer and will essentially be of three types:

4.2.1 **Discipline Specific Elective Course:** An Elective Course which is offered by the main discipline. The discipline offering a Discipline Specific Elective course may also offer discipline related elective courses that are interdisciplinary in nature. A student enrolled in an undergraduate degree program with Honours will have to earn 24 course credits from Discipline Specific Elective courses. For a student enrolled in a non-Honours undergraduate degree program in science, the course credit requirement from Discipline Specific Elective courses will be 36 credits. For a student enrolled in a non-Honours undergraduate degree program in Arts and Commerce, the course credit requirement from Discipline Specific Elective courses will be 24 credits.

4.2.2 **Generic Elective Course:** A Generic Elective Course is offered by an unrelated discipline and has the objective of broadening the academic experience of a student. A student enrolled in an undergraduate degree program with Honours can acquire 24 course credits from Generic Elective Courses. A Core Course offered in a discipline may be allowed as an Elective to a student from another discipline. This course will be treated under the category of Generic Elective Courses. Generic Elective Courses are not available to students in a non-Honours undergraduate science degree program while other non-Honours undergraduate programmes require enrollees to take up two such courses.

4.2.3 **Dissertation/Project:** Engaging students in a Project/ Dissertation work, which requires knowledge application and problem solving, is considered to be important in the learning process. All students enrolled in an undergraduate degree program (Honours and non-Honours) will have the option of choosing to undertake

Project/Dissertation work for 6 credits in lieu of a 6 credit Discipline Specific Elective course in the fifth semester only.

4.3 **Ability Enhancement Courses:** Ability Enhancement Courses which are to be taken up by students in an undergraduate degree program will be of two types:

4.3.1 **Ability Enhancement Compulsory Courses:** These 4 credit courses are mandatory for every student enrolled in an undergraduate degree program. A student will have to take up 4 credit course in Environmental Studies and a second 4 credit course in English Communication/ MIL Communication.

4.3.2 **Skill Enhancement Courses:** Skill Enhancement Courses will be value-based or skill based and there will be a pool of courses on offer. A student enrolled in an undergraduate degree program with Honours will have to take up a minimum of two SEC courses of 4 credits each as part of the program requirement. For students enrolled in non-Honours undergraduate degree programs the credit requirement from Skill Enhancement Courses will be 16 credits. It is desirable that the university will prepare Skill Enhancement Courses for various disciplines from the list of SEC provided by the UGC template. However colleges are free to develop their own SECs independently which must have prior approval of the Academic Council.

5. STRUCTURE OF COURSES AND CREDITS OF THE UGCBCS PROGRAMMES

Gauhati University has adopted the under-graduate Choice Based Credit System subject to the UGCBCS Regulations, 2018, Gauhati University. The university has to the best possible extent attempted to conform to the Instructional Template disseminated by UGC. The programmes offered by Gauhati University will conform to the following guidelines.

5.1 Gauhati University will adhere to the common minimum curriculum and syllabi of the core papers as framed by the UGC. The permissible deviation in the content in the core papers is 30 % at the maximum.

5.2 The university through their Under Graduate Committee of Courses and Studies (UG-CCS) will design their own syllabi for the elective papers. The UG-CCS may adopt elective courses from the list provided by the UGC or alternately frame courses independently as per their specialization and available infrastructure.

5.3 Two categories of Ability Enhancement Courses will be offered:

- 5.3.1 a) English Communication (for BSc) and English/MIL Communication (for BA) and Business Communication (for/BCom) will be offered in the 1st Semester and
b) Environmental Studies will be offered in the 2nd semester.

5.3.2 Skill Enhancement Courses will be offered by affiliated colleges from the UGC list. Alternately colleges may develop these courses on the basis of local expertise and market demand and these courses must have prior approval of the Academic Council.

5.4 5.4 For the purpose of computation of work-load the following mechanism is to be adopted:

- 1 Credit = 1 Theory period of one hour duration per week
- 1 Credit = 1 Tutorial period of one hour duration per week
- 1 Credit = 1 Practical period of two hour duration per week

For ODL learners admitted in GUIDOL, a 4 Credit course involves 120 hours of learner study while a 6 credit course involves 180 hours of learner study. Learn Study comprises of learning activities like reading and comprehending the print material, listening to audio, watching video, attending counseling sessions, teleconference and writing assignment response.

6. REQUIREMENTS FOR AN UNDERGRADUATE DEGREE

The following table indicates the requirements for successful completion of under-graduate degree in Gauhati University –

DEGREE	MINIMUM REQUIREMENTS
Undergraduate Degree with Honours (all disciplines)	<ul style="list-style-type: none">• 14 core papers in that discipline• 2 Ability Enhancement Compulsory Courses• 2 Skill Enhancement Courses (minimum)• 4 Discipline Specific Elective• 4 Generic Elective papers
Undergraduate Degree (in science)	<ul style="list-style-type: none">• 4 core papers each in three disciplines of choice• 2 Ability Enhancement Compulsory Courses• 4 Skill Enhancement Courses (minimum)• 2 papers each of Discipline Specific Elective papers based on three disciplines of choice selected above, respectively.
Undergraduate degree in Humanities/ Social Sciences/ Commerce	<ul style="list-style-type: none">• 4 core papers each in two disciplines of choice• 2 core papers each in English and MIL/Alt English respectively.• 2 Ability Enhancement Compulsory Courses• 4 Skill Enhancement Courses (minimum)• 2 papers each from a list of Discipline Specific Elective papers based on the two disciplines of choice selected above• 2 papers from the list of Generic Electives papers.

7. CREDIT ALLOCATION AND PROGRAMME TEMPLATE

Adopted from UGC Instructional Template for Facilitating Implementation of Choice Based Credit System (CBCS)

7.1 Credit Allocation (B.Sc. Honours)

Course	*Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(14 Papers)	14X4= 56	14X5=70
Core Course Practical / Tutorial*		
(14 Papers)	14X2=28	14X1=14
II. Elective Course (6 Credits)		
(8 Papers)		
A.1. Discipline Specific Elective (4 Papers)	4X4=16	4X5=20
A.2. Discipline Specific Elective Practical/ Tutorial* (4 Papers)	4 X 2=8	4X1=4
B.1. Generic Elective/ Interdisciplinary (4 Papers)	4X4=16	4X5=20
B.2. Generic Elective Practical/ Tutorial* (4 Papers)	4 X 2=8	4X1=4
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credit each)	2 X 4=8	2 X 4=8
Environmental Science		
English Communication		
2. Skill Enhancement Courses (SEC) (Minimum 2) (2 Papers of 4 credit each)	2 X 4=8	2 X 4=8
Total credit	148	148

* wherever there is a practical there will be no tutorial and vice-versa

7.2 Programme Template (B.Sc. Honours)

Semester	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C1	English Communication			GE-1
	C2				
II	C3	Environmental Studies			GE-2
	C4				
III	C5		SEC -1		GE-3
	C6				
	C7				
IV	C8		SEC -2		GE-4
	C9				
	C 10				
V	C 11			DSE-1	
	C 12			DSE -2	
VI	C 13			DSE -3	
	C 14			DSE -4	

7.3 Credit Allocation: B.A./B.Com. (Honours)

Course	*Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(14 Papers)	14X4= 56	14X5=70
Core Course Practical / Tutorial*		
(14 Papers)	14X2=28	14X1=14
II. Elective Course (6 Credits)		
(8 Papers)		
A.1. Discipline Specific Elective (4 Papers)	4X4=16	4X5=20
A.2. Discipline Specific Elective Practical/ Tutorial* (4 Papers)	4 X 2=8	4X1=4
B.1. Generic Elective/ Interdisciplinary (4 Papers)	4X4=16	4X5=20
B.2. Generic Elective Practical/ Tutorial* (4 Papers)	4 X 2=8	4X1=4
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credits each)	2 X 4=8	2 X 4=8
Environmental Science		
English/MIL Communication		
2. Skill Enhancement Courses (SEC) (Minimum 2) (2 Papers of 4 credits each)	2 X 4=8	2 X 4=8
Total credit	148	148

* wherever there is a practical there will be no tutorial and vice-versa

7.4 Programme Template: B.A./B.Com. Honours

Semester	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C1	English/MIL Communication (BA,hons)			GE-1
	C2	/ Business Communication (BCom-hons)			
II	C3	Environmental Studies			GE-2
	C4				
III	C5		SEC -1		GE-3
	C6				
	C7				
IV	C8		SEC -2		GE-4
	C9				
	C 10				
V	C 11			DSE-1	
	C 12			DSE -2	
VI	C 13			DSE -3	
	C 14			DSE -4	

7.5 Credit Allocation (B.Sc. Regular)

Course	*Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(12 Papers)	12X4= 48	12X5=60
04 Courses from each of the 03 disciplines of choice		
Core Course Practical / Tutorial*		
(12 Practical/Tutorials*)	12X2=24	12X1=12
04 Courses from each of the 03 disciplines of choice		
II. Elective Course (6 Credits)		
(6 Papers)	6X4=24	6X5=30
Two papers from each discipline of choice including paper of interdisciplinary nature		
Elective Course Practical / Tutorial*	6 X 2=12	6X1=6
Two papers from each discipline of choice including paper of interdisciplinary nature		
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credit each)	2 X 4=8	2 X 4=8
Environmental Science		
English Communication		
2. Skill Enhancement Courses (SEC) (4 Papers of 4 credit each)	4 X 4=16	4 X 4=16
Total credit	132	132

* wherever there is a practical there will be no tutorial and vice-versa

7.6 Programme Template: BSc (Regular)

Semester	CORE COURSE (14)	Ability Compulsory Course (AECC) (2)	Enhancement Course (SEC) (4)	Discipline Specific Elective (DSE) (6)
I	DSC- 1 A	English Communication		
	DSC- 2 A			
	DSC- 3 A			
II	DSC- 1 B	Environmental Studies		
	DSC- 2 B			
	DSC- 3 B			
III	DSC- 1 C		SEC -1	
	DSC- 2 C			
	DSC- 3 C			
IV	DSC- 1 D		SEC -2	
	DSC- 2 D			
	DSC- 3 D			
V			SEC -3	DSE-1 A
				DSE-2 A
				DSE-3 A
VI			SEC -4	DSE-1 B
				DSE-2 B
				DSE-3 B

7.7 Credit Allocation (BA, B Com. Regular)

Course	*Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(12 Papers)	12X4= 48	12X5=60
Two papers - English		
Two papers - MIL/Alt English		
Four papers - Discipline 1		
Four papers - Discipline 2		
Core Course Practical / Tutorial*	12X2=24	12X1=12
(12 Practicals/Tutorials)		
II. Elective Course (6 Credits)		
(6 Papers)	6X4=24	6X5=30
Two papers - Discipline 1 specific		
Two papers - Discipline 2 specific		
Two papers - Inter disciplinary		
Two papers from each discipline of choice and two papers of interdisciplinary nature		
Elective Course Practical / Tutorial*	6 X 2=12	6X1=6
(6 Practical/Tutorials*)		
Two papers - Discipline 1 specific		
Two papers - Discipline 2 specific		
Two papers - Generic (Inter disciplinary)		
Two papers from each discipline of choice and two papers of interdisciplinary nature		
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th Semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credit each)	2 X 4=8	2 X 4=8
Environmental Science		
English/MIL Communication		
2. Skill Enhancement Courses (SEC) (4 Papers of 4 credit each)	4 X 4=16	4 X 4=16
Total credit	132	132

* wherever there is a practical there will be no tutorial and vice-versa

7.8 Programme Template: (BA, B Com. Regular)

Semester	CORE COURSE (12)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (4)	Discipline Specific Elective (DSE) (4)	Generic Elective (GE) (2)
I	English-1	English/MIL Communication (BA) / Business Communication (BCom)			
	DSC- 1 A				
	DSC- 2 A				
II	English-2	Environmental Studies			
	DSC- 1 B				
	DSC- 2 B				
III	MIL-1/Alt English-1		SEC -1		
	DSC- 1 C				
	DSC- 2 C				
IV	MIL-2/Alt English-2		SEC -2		
	DSC- 1 D				
	DSC- 2 D				
V			SEC -3	DSE-1 A	GE-1
				DSE-2 A	
VI			SEC -4	DSE-1 B	GE-2
				DSE-2 B	

8. COURSE CODES

Paper Code Structure[†]

The code structure of a paper is given below:

AAA – **TT** – **XYXC**

AAA : Subject : 3-letter subject code (see the suggested table below)

TP : Type of Course : **HC** (Honours Core)
RC (Regular Core)
HG (Generic Elective for Honours)
RG (Generic Elective for Regular)
HE (Discipline Specific Elective for Honours)
RE (Discipline Specific Elective for Regular)
SE (Skill Enhancement)

X : Semester : Numerical digit for Semester. One of 1, 2, 3, 4, 5, or 6

YY : Serial No of Paper : Two-digit numerical number (within the semester)

C : Credits : Either 6 or 4.

ENG-AE-1014 : AECC - English Communication Paper

ASM-AE-1014 : AECC - Assamese / MIL Communication Paper

ENV-AE-2014 : AECC - Environmental Science Paper

ENG-CC-X016 : English Compulsory Paper (X = 1 or 2 depending on semester)

ALT-CC-X016 : Alternative English Compulsory (X = 3 or 4 depending on semester)

ASM-CC-X016 : Assamese / MIL Compulsory (X = 3 or 4 depending on semester)

9. CREDITS AND ATTENDANCE

9.1 To be awarded credit in Core Courses, Elective Courses, Discipline Specific Elective (DSE) Course, Generic Elective (GE) Course and Ability Enhancement Courses (AEC) [comprising of Ability Enhancement Compulsory Courses (AECC) & Skill Enhancement Courses (SEC)], students must have at least 75% attendance. The attendance of all courses including the Skill Enhancement Courses shall be counted and accounted for in full while determining if the student has met the minimum attendance norms of Gauhati University.

9.1.1 Attendance means attending direct instruction hours, i.e., theory classes, seminars, workshops, practical, internships, educational trips, field works, project works etc.

9.1.2 Learning in distance mode or self learning by library works or by internet hours will not be counted as attendance, unless it is specifically identified and prior approved by the University.

9.1.3 Basis for calculation of attendance: The basis for the calculation of the attendance shall be the number of hours of contact prescribed by the University.

9.2 In case a student fails to have at least 75 percent attendance, he/she will not be allowed to sit for the end semester examination and hence have to repeat the concerned semester after the successful completion of the subsequent semesters.

(For example, if a student fails to secure the necessary credit in the first semester, then he/she can register in the second and subsequent semesters. And only after the successful completion of the sixth semester, can he/she repeat the first semester to earn the deficit credits.)

9.2a Provided that the above stipulations of at least 75 % attendance shall not apply to ODL learners admitted under GUIDOL.

9.3 LEAVE OF ABSENCE

A student having less than 75% attendance will not be allowed to appear in the End-Semester Examination (ESE) except in the following cases:

9.3.1 Medical leave: Any student securing less than 75% due to medical reasons will have to apply for medical leave in a prescribed form (within seven days from the date of absence) accompanied by clear reason(s) for absence to the authorized functionaries. The completed form will have to be supported by a Medical Certificate from an authorized medical practitioner. The principal will examine each case of medical absence individually and decide whether it merits exemption. However, the minimum attendance after accounting for medical leave granted will still have to be 75%. *Under no circumstances will a student be allowed to appear for the end semester examination or continue with the programme if his/her attendance, after consideration of medical leave, falls below 75%. Such consideration will be subject to the condition that the student must have a minimum of 60% attendance.*

9.3.2 Prescribed co-curricular activities (CCA): For absence due to participation in prescribed co-curricular activities (e.g. NCC, NSS, Youth festivals, sports etc.), the claim for CCA leave will have to be made in a prescribed form and supported by authenticated certificates from the concerned authorities. Only those students, whose names are on the list of students made available by the principal as being allowed to participate in such activities, will be considered for CCA leave. The principal will examine each individual case of such CCA leave applied for, and decide whether it merits exemption. However, the minimum attendance after accounting for CCA leave granted will still have to be 75%. *Under no circumstances will a student be allowed to appear for the end semester examination or continue with the programme if his/her attendance, after consideration of leave for co-curricular activities, falls below 75%.*

10. EXAMINATIONS, EVALUATION AND GRADING

10.1 Examinations

Examinations, whether internal or end semester, theory or practical, would be **counted in totality** for the purpose of considering a student passed or failed.

10.1.1 If a student does not appear in a paper (internal or external, theory or practical) in an examination, the student will be considered failed in that paper. Any paper where a student fails will be called an 'Arrear' paper of that student.

In case a student fails in any one or more papers in an end semester examination, she/he can appear in all the papers in which she/he failed.

10.1.2 A student having 'arrear' in external examination, either in theory or practical papers, shall be allowed chance to clear the same in the next available end-semester examinations, with the following restrictions:

10.1.2a No student will be allowed to appear in the first and fifth semester examinations simultaneously.

10.1.2b No student will be allowed to appear in the second and sixth semester examinations simultaneously.

10.1.3 The first and the fifth semester examinations will be held simultaneously, while the third semester examination will be held separately. Similarly, the second and the sixth semester examinations will be held simultaneously, while the fourth semester examination will be held separately.

10.1.4 A student may be allowed once to reappear in any one of the honours theory courses in each of the first, second and third semesters for betterment of grades if the candidate secured 'pass grades' in all papers. Students will be allowed to reappear only in the next similar examination. Grades obtained either in the earlier examination or in the subsequent examination, whichever is higher, will be awarded to the student.

10.1.5 No betterment will be allowed in internal and practical examinations in any semester.

10.1.6 A student must pass all her/his semester examinations, including 'arrear' and 'betterment' chances within six years from the date of admission to the first semester. In this context, six years means six academic sessions. In the event of a student failing to do

so, she/he will have to take fresh admission in the first semester. Subject to the said condition, a student (with necessary credit/attendance) who could not appear or who failed in any semester examination will be allowed chance to clear the same as follows:

- i. First semester with regular third semester examination.
- ii. Second semester with regular fourth semester examination.
- iii. Third semester with regular fifth semester examination.
- iv. Fourth semester with regular sixth semester examination.

10.1.7 There shall be no scope for a student to appear as Private Candidate in any course.

10.1.8 Schedule: The schedule for examinations will be as per the concerned Academic Calendar. The exact dates of examinations and related information will be notified by the office of the Controller of Examinations, Gauhati University

10.2 Evaluation: A student's performance will be evaluated throughout the year based on continuous assessment. Evaluation of the student's performance in each semester for every course will be based on the following:

- Internal Assessment (IA)
- End Semester Examination (ESE)

For a student to pass in a course, she/he has to pass on the basis of the marks secured in TOTALITY in both Internal Assessment and End Semester Examination.

10.2.1 Internal Assessment (IA): IA will ideally account for 20% of the total marks allotted to a course/paper. For evaluating the performance of the students in a continuous way, the following measures will be adopted for distributing marks earmarked for IA.

10.2.1a Sessional or mid-term examination will be conducted for 50% of the total marks allotted for IA of a course/paper. (For example, if 20 marks is allotted for IA of a course/paper, then 10 marks will be kept aside for assessment in sessional or mid-term examination. The sessional examination will be held for 30 marks for the convenience of setting questions and covering the syllabus and the marks secured by the students will be proportionately converted to be out of 10 marks. Duration of the examination will be one hour. The question papers of the sessional or mid

term examinations will be set by the concerned teacher(s) and the evaluated answer scripts will be shown to the students and corrections will be made, if any.

10.2.1b 20% of the marks allotted for IA will be awarded to the students based on class attendance. If the total marks for IA is 20, then 4 marks will be awarded to the students based on class attendance. The following criteria will be adopted for awarding marks under this category:

- a) Class attendance from 76% to 80%..... 1 mark;
- b) Class attendance from 81% to 85%..... 2 marks;
- c) Class attendance from 86% to 90%..... 3 marks;
- d) Class attendance from 91% and above..... 4 marks.

10.2.1c Rest 30% of the marks allotted (i.e. 6 marks) for IA will be distributed and awarded on the basis of performance of the students on the following criteria:

- i) for Practical Courses: Practical (internal practical including practical copy)
- ii) For non-practical courses :

Home assignments; Seminar/Group discussions; Field work; Performance in co-curricular and extra-curricular activities.

10.2.1d Internal marks will be scaled up/down to ensure a maximum permissible deviation of 20 percent from ESE marks. Thus, internal marks can deviate only within the mark band of % marks secured in ESE plus /minus 20 percent.

10.2.1e In case of ODI, learners admitted under GUIDOL, IA will ideally account for 20 % of the total marks allotted to a course (in a manner similar to conventional mode students) and will be distributed as follows

- i) Sessional or Mid-term examinations will be conducted for 50% of the total marks allotted for IA of a course (in a manner similar to conventional mode students)
- ii) Rest 50% of the marks allotted for IA will be distributed and awarded on the basis of performance of students on the following criteria (in a manner similar to conventional mode students)

- Home assignments
- Seminars/Group discussions
- Field Work
- Performance in co-curricular and extra-curricular activities.

10.2.2 End Semester Examination (ESE):

The ESE will comprise of 80% of the total marks earmarked for a course. The ESE shall be of three hours duration for a course whose ESE component exceeds 50 marks. For a student to pass in a course/paper, her/his marks in both Internal Assessment and End Semester Examination will be accounted for in totality

For Courses with Practical, ESE will be conducted as per Theory (60 marks) plus Practical (20 marks)

For courses without practical the ESE will be conducted for 80 marks.

For odd semesters, ESE will be held in the month of November and for the even semesters, the examination will be held in the month of May.

10.2.3 Pass Marks

The conditions for successful completion (Pass) of a course is as per the Grading Template indicated in Section- 10.3.7

10.2.4 Number of Attempts

10.2.4a A student who has completed a semester may be allowed to proceed to the next semester, irrespective of the number of papers in which she/he failed.

10.2.4b In order to complete an UG degree, a student must obtain passing grades in all the papers prescribed.

10.2.4c A student having failed to fill in his examination form in the first semester may be allowed to appear in the second semester if all other eligibility criteria are fulfilled.

10.2.5 Procedure for conducting Sessional examination:

10.2.5a The sessional examination as part of Internal Evaluation will comprise of 50% of the marks earmarked. Since Internal Evaluation component will be of 20 marks, Sessional examination will be held for determining students' performance out of 10 marks. For the convenience of setting questions and covering the syllabus, the Sessional examination will be held for 30 marks of one hour duration and the marks secured by the students will be proportionately converted to be out of 10 marks. The sessional examination for a paper will be conducted by the teacher(s) who teaches that paper. The setting of question paper, invigilation duty, evaluation of answer scripts for each paper will be done by the teacher(s) concerned as part of his/her normal duty without hampering regular classes as far as practicable.

10.2.5b The teacher(s) concerned will fix the date of the sessional examination in each paper. The students shall write their answers in the sessional examinations in proper 'additional answer scripts' of Gauhati University.

10.2.5c After evaluation, the answer scripts shall be shown to the students and corrections in evaluation, if any, shall be made. After this, the answer scripts shall be collected back from the students. The entire process of evaluation in the sessional examination should not take more than two weeks from the date of examination.

10.2.5d Scrutiny of answer scripts of sessional examination will be done in the college by an Examination Committee formed by the Principal in consultation with the faculties of the college. During scrutiny, if any discrepancy is observed in the evaluation certain questions, the same should be re-evaluated by a teacher of that subject appointed by the Examination Committee.

10.2.5e Answer scripts of sessional examinations shall be submitted to the University after one year of the examination concerned.

10.2.5f Before the end of the End Semester Examination, the Colleges shall compile the marks obtained by the students under different heads of Internal Evaluation such as Sessional examination, Class attendance and from other criteria mentioned in 10.2.1a, 10.2.1b & 10.2.1c. The compiled marks will be submitted to the Controller of Examinations through online feeding.

10.2.6 Procedure for External Evaluation

10.2.6a The Controller of Examination, Gauhati University will make necessary arrangement for announcing the date of examinations and other necessary procedures as per the University Rules.

10.2.6b The End Semester Examination shall be of three hour duration.

10.2.6c The affiliated colleges shall send the answer scripts of the external examinations to the Zonal Officers as directed by the Controller of Examinations, Gauhati University.

10.2.6d The Evaluation Zone shall arrange everything needed for the evaluation and scrutiny of the answer scripts. After evaluation and scrutiny, the answer scripts are to be sent to the Controller of Examinations, Gauhati University along with the mark foils and the scrutiny sheets.

10.2.6e Scrutiny will be carried out at the zones by teachers who qualify to be examiners, as per this regulation, in the subjects concerned. The scrutinizers shall go through each answer script to detect the following mistakes during scrutiny – wrong entry, omissions, under-marking, over-marking, and wrong calculation of total marks.

10.2.6f In case a candidate is not satisfied with the grades obtained by her/him in a theory paper in the end semester examination, she/he may apply for reevaluation (with photocopy) and reevaluation (without photocopy) of the answer script by depositing the prescribed fees. Alternately the candidate may seek the photocopy of the answer sheet (without evaluation) on payment of the prescribed fee.

10.2.6g In case of gross damage or missing of answer scripts due to any unforeseen reasons beyond the control of the university, special examinations shall be held within a stipulated time and attempts shall be made to declare the results of such examinations at the earliest, so that the students concerned get proper justice.

10.2.7 Who can be an Examiner?

To become an external examiner in any UG examinations, the following conditions are mandatory:

10.2.7a For Honours course, a teacher must have taught the subject/paper for a minimum period of four years in an affiliated college of a university.

10.2.7b For Elective course, a teacher must have taught the subject/paper for a minimum of two years in an affiliated college of a university.

10.2.7c A scrutiniser of any subject/paper must qualify to become an examiner of that subject/paper.

10.2.7d A person who has ‘close relative(s)’ appearing in a particular university examination shall not be associated with it in any capacity. In this context, ‘Close relative’ means husband, wife, son, daughter, father, mother, grand-children, son-in-law, daughter-in-law, brother, sister, brother-in-law, sister-in-law, father-in-law, mother-in-law, nephew, niece and first cousin. It shall be the responsibility of the person involved in an examination in any capacity to declare that none of her/his close relative(s) is appearing in that examination.

10.3 Grading:

Gauhati University has adopted the grading system recommended by the UGC which will ensure uniformity with the rest of the country. This is expected to facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of the students.

The University, accordingly, will follow the Grading System under which the marks are converted to grades based on a Grading Template indicated in Section- 10.3.7. The following definitions and explanations are used in the Grade Sheet design –

10.3.1 Credit: A unit by which course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching/tutorial or two hours of practical per week.

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

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

10.3.4 Credit Point: It is the product of grade point and number of credits for a course.

The grading of ODL students shall be done separately

10.3.5 Semester Grade Point Average (SGPA): It is the measure of performance of work done in a semester. It is the 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.

$$\text{SGPA } (S_j) = \sum (C_{ij} \times G_{ij}) / \sum C_{ij}$$

where

S_j = SGPA of the j^{th} semester

C_{ij} = number of credits for the i^{th} course of the j^{th} semester,

G_{ij} = grade point obtained by the student in the i^{th} course of the j^{th} semester.

10.3.6 Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. It is the ratio of sum of the product of the SGPA of each semester and the respective credits earned divided by the total credits earned in the programme.

$$\text{CGPA} = \sum (C_j \times S_j) / \sum C_j,$$

Where

C_j = credits earned in semester j ,

S_j = SGPA in semester j

$\sum C_j$ = Total credits earned in the programme

10.3.7 Conversion of marks (%) to Letter Grades and Grade Points:

Conversion of percentage into credit(s) and grade(s):The following illustrations could be taken as an example for computing SGPA and CGPA from percentage to credits for Honours courses in all disciplines, degree Program courses in Science subjects and degree Program courses in Humanities, Social Sciences and Commerce subjects:

1. Percentage to Grades and Grade Points □

The following formula may be used to convert marks (%) into letter grades.

Let \bar{X} = mean of % age marks of all student appeared in the paper.

σ = Standard deviation

m = % of marks obtained

Letter grade	Numerical grade	Formula
O (outstanding)	10	$m \geq \bar{X} + 2.5 \sigma$
A+ (Excellent)	9	$\bar{X} + 2.0 \sigma \leq m < \bar{X} + 2.5 \sigma$
A (Very Good)	8	$\bar{X} + 1.5 \sigma \leq m < \bar{X} + 2.0 \sigma$
B+ (Good)	7	$\bar{X} + 1.0 \sigma \leq m < \bar{X} + 1.5 \sigma$
B (Above average)	6	$\bar{X} \leq m < \bar{X} + \sigma$
C (Average)	5	$\bar{X} - 0.5 \sigma \leq m < \bar{X}$
D (Pass)	4	$\bar{X} - \sigma \leq m < \bar{X} - 0.5 \sigma$
F (Fail)	0	$m < \bar{X} - \sigma$
Ab (Absent)	0	

* Minor variations may be adjusted by the individual institution.

Note: A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

10.3.8 ILLUSTRATION OF COMPUTATION OF SGPA AND CGPA AND FORMAT FOR TRANSCRIPTS

Adopted from UGC Instructional Template for Facilitating Implementation of Choice Based Credit System (CBCS)

10.2.8a B.Sc./B.Com./B.A. (Honours Course)

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA (Credit Point/Credit)
Semester I					
C-1	06	A	8	48	
C-2	06	B+	7	42	
AECC-1	04	B	6	24	
GE-1	06	B	6	36	
Total	22			150	6.8 (150/22)
Semester II					
C-3	06	B	6	36	
C-4	06	C	5	30	
AECC -2	04	B+	7	28	
GE-2	06	A+	9	54	
Total	22			148	6.73 (148/22)
Semester III					
C-5	06	A+	9	54	
C-6	06	O	10	60	
C-7	06	A	8	48	
SEC-1	04	A	8	32	
GE-3	06	O	10	60	
Total	28			254	9.07 (254/28)
Semester IV					
C-8	06	B	6	36	
C-9	06	A+	9	54	
C-10	06	B	6	36	
SEC-2	04	A+	9	36	
GE-4	06	A	8	48	
Total	28			210	7.5 (210/28)
Semester V					
C-11	06	B	6	36	
C-12	06	B+	7	42	
DSE-1	06	O	10	60	

DSE-2	06	A	8	48	
Total	24			186	7.75 (186/24)
Semester VI					
C-13	06	A+	9	54	
C-14	06	A	8	48	
DSE-3	06	B+	7	42	
DSE-4	06	A	8	48	
Total	24			192	8.0 (192/24)
CGPA					
Grand Total	148			1140	7.7 (1140/148)

Summary

Semester	SGPA
Semester 1	Credit: 22; SGPA: 6.8
Semester 2	Credit: 22; SGPA: 6.73
Semester 3	Credit: 28; SGPA: 9.07
Semester 4	Credit: 28; SGPA: 7.5
Semester 5	Credit: 24; SGPA: 7.75
Semester 6	Credit: 24; SGPA: 8.0
Thus,	
$CGPA = (22 \times 6.8 + 22 \times 6.73 + 28 \times 9.07 + 28 \times 7.5 + 24 \times 7.75 + 24 \times 8.0) / 148 = 7.7$	

10.3.8b B.Sc. (Regular Course)

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA (Credit Point/Credit)
Semester I					
DSC-1A	06	B	6	36	
DSC-2A	06	B+	7	42	
DSC-3A	06	C	5	30	
AECC -1	04	B	6	24	
Total	22			132	6.0
Semester II					
DSC-1B	06	B	6	36	
DSC-2B	06	B	6	36	
DSC-3B	06	C	5	30	
AECC-2	04	A+	9	36	
Total	22			138	6.27
Semester III					
DSC-1C	06	A	8	48	
DSC-2C	06	A+	9	54	
DSC-3C	06	A	8	48	
SEC-1	04	A	8	32	
Total	22			182	8.27
Semester IV					
DSC-1D	06	C	5	30	
DSC-2D	06	B	6	36	
DSC-3D	06	B+	7	42	
SEC-2	04	A+	9	36	
Total	22			144	6.54
Semester V					
DSE-1A	06	B	6	36	
DSE-2A	06	A+	9	54	
DSE-3A	06	A	8	48	
SEC-3	04	B	6	24	
Total	22			162	7.36
Semester VI					
DSE-1B	06	B+	7	42	
DSE-2B	06	B	6	36	
DSE-3B	06	C	5	30	
SEC-4	04	C	5	20	

Total	22			128	5.82
CGPA					
Grand Total	132			886	6.71 (886/132)

Summary

Semester	SGPA
Semester 1	Credit: 22; SGPA: 6.0
Semester 2	Credit: 22; SGPA: 6.27
Semester 3	Credit: 22; SGPA: 8.27
Semester 4	Credit: 22; SGPA: 6.54
Semester 5	Credit: 22; SGPA: 7.36
Semester 6	Credit: 22; SGPA: 5.82
Thus,	
$\text{CGPA} = (22 \times 6.0 + 22 \times 6.27 + 22 \times 8.27 + 22 \times 6.54 + 22 \times 7.36 + 22 \times 5.82) / 132 = 6.71$	

10.3.8c B.A./B.Com (Regular Course)

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit X Grade)	SGPA (Credit Point/Credit)
Semester I					
English-1	06	A	8	48	
DSC-1A	06	B	6	36	
DSC-2A	06	A	8	48	
AECC-1	04	B+	7	28	
Total	22			160	7.3
Semester II					
MIL-1	06	A+	9	54	
DSC-1B	06	B+	7	42	
DSC-2B	06	B+	7	42	
AECC-2	04	B	6	24	
Total	22			162	7.36
Semester III					
English -2	06	B	6	36	
DSC-1C	06	A	8	48	
DSC-2C	06	B	6	36	
SEC-1	04	A	8	32	
Total	22			152	6.91
Semester IV					
MIL - 2	06	B+	7	42	
DSC-1D	06	A+	9	54	
DSC-2D	06	A	8	48	
SEC-2	04	B	6	24	
Total	22			168	7.63
Semester V					
SEC-3	04	A+	9	36	
DSE-1A	06	A	8	48	
DSE-2A	06	A+	9	54	
GE-1	06	A+	9	54	
Total	22			192	8.73
Semester VI					
SEC-4	04	A+	9	36	
DSE-2A	06	B	6	36	
DSE-2B	06	A	8	48	
GE-2	06	A	8	48	

Total	22			168	7.63
CGPA					
Grand Total	132			1002	7.59 (1002/132)

Summary

Semester	SGPA
Semester 1	Credit: 22; SGPA: 7.27
Semester 2	Credit: 22; SGPA: 7.36
Semester 3	Credit: 22; SGPA: 6.91
Semester 4	Credit: 22; SGPA: 7.63
Semester 5	Credit: 22; SGPA: 8.73
Semester 6	Credit: 22; SGPA: 7.63
Thus,	
$\text{CGPA} = (22 \times 7.27 + 22 \times 7.36 + 22 \times 6.91 + 22 \times 7.63 + 22 \times 8.73 + 22 \times 7.63) / 132 = 7.59$	

10.3.9 Grade Sheet Design

The Grade Sheet will be designed by the University to optimize the grading system adopted.

The Grade Sheet would not indicate the actual marks secured by the student in the Examination. However the following conversion formula to obtain a standard percentage would be indicated

$$\text{CGPA} \times 10$$

This practice will be followed until the UGCBCS is implemented in a comprehensive manner in the country and the CGPA is accepted as a standard indicator of educational attainment across the nation.

11. Coordination Committee for Undergraduate-CBCS (CC-UGCBCS)

The Coordination Committee for Undergraduate CBCS (CC-UGCBCS) will facilitate the roll out of UGCBCS in the university and in general, administer the UGCBCS. The CC-UGCBCS will act as the nodal agency to liaise with the affiliated colleges on a continuous basis. Its scope of activities will include

11.1 Facilitating the UGCBCS Regulation and receiving it if and when it is approved by the Honorable Academic Council

11.2 Dissemination of the regulation among affiliated colleges

11.3 Facilitating the preparation of UGCBCS syllabus and receiving it when it is ratified by the Honorable Academic Council

11.4 Dissemination of the approved syllabus among affiliated colleges

11.5 Grievance Redressal:

The CC-UGCBCS shall be the final point of redressal in matters of grievances pertaining to the UGCBCS courses. The CC-UGCBCS will address attendance related issues brought to its attention by the affiliated colleges and concerned students (as a further appellate for students subsequent to the intervention of the concerned Principal of the college) and other such matters relating to UGCBCS programmes.

12. COMPOSITION OF THE CC-UGCBCS

The CC-UGCBCS shall be constituted before the implementation of UGCBCS in Gauhati University. The Committee shall be constituted by the following members:

1. The Vice Chancellor of Gauhati University (Chairperson)
2. The Deans of the Faculties
3. Registrar, Gauhati University
4. Academic Registrar (Convener)
5. The Controller of Examinations
6. Deputy Controllers of Examinations
7. Secretary, University Classes
8. Coordinator IQAC

The following members will have a term of three years -

9. Five teachers from Gauhati University
10. Five Principals of affiliated colleges
11. Five teachers of affiliated colleges

The CC-UGCBCS will constitute an Executive Committee (a working committee) from among its members to look into the day-to-day administration of the CBCS, matters requiring liaison between affiliated colleges and the Controller's office, and so on.

Committee for framing the Under Graduate Choice Based Credit System Regulation:

- | | | |
|-----|----------------------------------|--------------------------------------|
| 1. | Prof. Nissar A. Barua (Chairman) | Gauhati University |
| 2. | Prof. Tarani Deka | Gauhati University |
| 3. | Prof. Anup Kumar Talukdar | Gauhati University |
| 4. | Prof. Anup Saikia | Gauhati University |
| 5. | Dr. Sanjeev Kumar Nath | Gauhati University |
| 6. | Mr. Anshuman Barua | Gauhati University |
| 7. | Dr. Hiranya Chaliha | Principal, Kaliabor College |
| 8. | Dr. Dharmendra Nath | Principal, S B Deorah College |
| 9. | Dr. Pranab Sandilya | Principal, Guwahati College |
| 10. | Dr. Utpal Dutta | Principal, Handique Girls' College |
| 11. | Mr. Biswajit Bhuyan | President, ACTA |
| 12. | Mr. Himangshu Maral | General Secretary, ACTA |
| 13. | Dr. Anupam Dutta | Assistant Secretary (Academic), ACTA |
| 14. | Academic Registrar, GU | Convener |