

1.2.1 List of Programs in which CBCS elective course system implemented in the last completed academic year certified by the Registrar of the affiliating university attested by Principal



NAGALAND UNIVERSITY

(A Central University Estd. By the Act of Parliament No. 35 of 1989)

HEADQUARTERS : LUMAMI – 798 627

No. NU/Ex-UGEx-02/2012 / 1937

Date: 03-08-2012

To

The Principal,

Model Christian College,
Konima - 797 001

Sub: General Guideline for Semester Under-Graduate

Sir/madam,

Kindly find enclosed herewith a copy of the general guideline for Semester Under-Graduate for your kind information and necessary action.

Yours faithfully,

Abhijit Sutradhar
3-8-12

(Abhijit Sutradhar)

Assistant Registrar (Examinations)

NAGALAND UNIVERSITY
HEADQUARTERS: LUMAMI - 798627

**GENERAL GUIDELINES ON INTRODUCTION OF SEMESTER SYSTEM AT THE
UNDER GRADUATE (UG) LEVEL BEGINNING FROM ACADEMIC SESSION, 2012**

FOR B.A./ B.SC./ BCA/B.COM. and BBA STREAMS

1. INTRODUCTION

Semester mode of Teaching and Examination in Indian Universities has become a National Policy. The UGC has now made it mandatory for all the Institutions of Higher Learning and affiliated Colleges in the country. A good number of Universities have already started implementing this new system of Education. Nagaland University in its Academic Council (AC) meeting held on 16th November, 2011 has taken the decision to introduce the semester system in all the affiliated Colleges. In pursuance of this decision, the AC has approved the Course Curriculum and Syllabi developed by the respective Boards of Undergraduate Studies (BUGS) and resolved to start Semester System in the Colleges from the Academic Session, 2012 in a phased manner. These guidelines have been approved by the AC in its 14th meeting held on 21st March, 2012.

The entire Course Curriculum and Syllabi have been designed by the respective BUGS keeping in view the needs of the present generation. It is a learner friendly programme suitable to meet the requirements of students in a competitive world. Therefore, it is expected that this will create a better teaching-learning spirit in the Institutions of Higher Education for which both teachers and students shall have to work more sincerely.

The Course Curriculum and Syllabi shall be revised/updated whenever necessary and **compulsorily** in every three years.

2. DURATION OF SEMESTER SYSTEM AND ACADEMIC YEAR

A Minimum of 3 years (6 Semesters) and a Maximum of 5 years (10 Semesters) shall be required to qualify for the B.A/ B.Sc./BCA/ B.Com., and BBA Degree. The duration of Semester **I, III and V** shall be from July to December (6 months) during which Admission, Course Work, Conduct of Examinations and Declaration of Results shall be completed including Semester Break. The duration of Semester **II, IV and VI** shall be from January to June (6 months) during which Admission, Course Work, Conduct of Examinations and Declaration of Results shall be completed, including Semester Break. Every College shall offer uniform pattern of Credit Loads and follow uniform Academic Calendar in each Semester. Academic Calendar shall be prepared by the University.

3. COMBINATION/ SELECTION OF PAPERS ¹⁸

- 1) For Honours Course, Total Elective Papers shall be ~~6~~ and Total Honours Papers shall be 8 or 7 + 1 Project Paper apart from other common courses like English, MIL, EVS carrying 100 Marks each.
- 2) For the Pass Course, there shall be 6 papers in each Elective Subject carrying 100 Marks each. Course combination structure both for Arts and Science indicating minimum number of Papers/Marks in different streams are demonstrated in Annexure I, which may vary depending on the choice of papers by students.

Examiner, the Examination Committee of the College may appoint a Faculty member as an External Examiner. Practical shall be a continuous process of evaluation which will be assessed internally. Courses which do not have Practical (eg. Mathematics) can offer general Theory paper of **5 Credits** instead of **3 or 4 Credits**. For Science Courses, Project Paper shall be compulsory. For Honours Paper, the Credits can be distributed between Theory and Practical depending on the needs of the paper.

9. CHOICE BASED CREDIT SYSTEM (C.B.C.S) AND ADD ON COURSE

(i) In the **Sixth semester**, a Choice Based Credit paper (CBCP) shall be offered compulsorily. CBCP is a part of the **six** semesters. Under this provision, student may be given freedom to opt for any paper of **3 Credits** as per his/her interest in any subject irrespective of the streams of studies within or outside of his/her thrust areas. A learner can also move from one department to another department within the institution carrying the same amount of Credits. In case of inability to offer CBCP, EVS II or any other suitable course may be developed by the college till the college is equipped to offer such course.

(ii) **Add On Course**- This is an additional course to be offered outside of the six semesters programme. It should be a vocational oriented course for which University shall give Certificate. Respective colleges can design such courses suitable to the local/regional needs. Add on Course can be a continuation of CBCP that can be developed by respective colleges and run the program according to local convenience. A comprehensive list of CBCP/Add on course is shown in **Annexure V**. This programme can be arranged in addition to normal routine works for which Colleges can charge extra fees from the learners to enable them to earn a Certificate. In this way, provisions for earning Certificate are encouraged at the College level.

10. GRADING SYSTEM

(1). A Seven Point Grading System shall be followed as given below. This is one of the most popularly used models followed by different Universities worldwide and which is seen as most appropriate in our context.

GRADING RANGE:

Grade	Marks	Grade Points
O	80 and above	7
A	70 to 79.99	6
B	60 to 69.99	5
C	55 to 59.99	4
D	50 to 54.99	3
E	45 to 49.99	2
F (Fail)	Less than 44.99	1

(2). In the Credit and Grade Point System, the assessment of individual courses in the concerned examinations shall be on the basis of Marks only, but the Marks shall be converted into Grades wherein, the overall performance of the learners shall be reflected considering the Credit Points for any given Course. However, the overall evaluation shall be designated in terms of Grade as demonstrated below.

11. ABBREVIATIONS AND FORMULA

G: Grade

GP: Grade Points

C: Credit

CP: Credit Points

CG: Credits x Grades (Product of Credits & Grades)

ΣCG: Sum of Product of Credits & Grade Points

5. BSc. Course (Pass & Hons.) (Practical Papers)

30% Internal
70% End Semester Exam

Course	No of Elective Subjects	Total papers per semester	Total No of papers	Total Marks per paper	Grand Total
Elective Courses (Practical Papers)	3	6	18	50	900
Hons. Course (Practicals)			6	50	300
Cumulative Total			24		1200

- Note:** 1. Mathematics has no practical hence no additional marks for practical is allotted.
2. Physics Honours has 2 practical papers.
3. Total marks may vary from paper to paper according to the choice of paper/course.

Annexure II (a)
A Model of Semester wise Distribution of Courses and Credit Values
(SCIENCE COURSES)

TYPE OF PAPERS / CREDITS ASSIGNED	FIRST YEAR (Credit x No. of Papers)		SECOND YEAR (Credit x No. of Papers)		THIRD YEAR (Credit x No. of Papers)		TOTAL CREDIT VALUE
	First Semester	Second Semester	Third Semester	Fourth Semester	Fifth Semester	Sixth Semester	
General Papers (Theory)	04 x 03	04 x 03	04 x 03	04 x 03	04 x 03	04 x 03	72
General Papers (Practical)	01 x 03	01 x 03	01 x 03	01 x 03	01 x 03	01 x 03	18
Other Courses	02x1 (General English)	02x1 (General English)	02 x 1 (Computer)		02 x 01 EVS	02 x 1 CBCP	10

For the Honours Courses, each semester shall have 3 Credits each and final semester shall have 2 Credits additional

1.2.1.1 Syllabus of programmes in which CBCS/Elective course system implemented

Department of Botany

NAGALAND UNIVERSITY CURRICULUM FOR B.Sc PROGRAMME IN BOTANY					
Semester		Course Number	Course Name	Credits	Total Credits
I	Pass	BOT-101	Biodiversity I	4	8
		BOT-102	Practical	1	
	Honours	BOT-103	Microbiology and Plant Pathology	2	
		BOT-104	Practical	1	
II	Pass	BOT-201	Biodiversity II and Plant Pathology	4	8
		BOT-202	Practical	1	
	Honours	BOT-203	Embryology and Palynology	2	
		BOT-204	Practical	1	
III	Pass	BOT-301	Morphology, Anatomy and Angiosperm Taxonomy	4	8
		BOT-302	Practical	1	
	Honours	BOT-303	Ethnobotany, Economic Botany and Biometric	2	
		BOT-304	Practical	1	
IV	Pass	BOT-401	Plant Physiology and Ecology	4	8
		BOT-402	Practical	1	
	Honours	BOT-403	Environmental Biology and Phytogeography	2	
		BOT-404	Practical	1	
V	Pass	BOT-501	Biochemistry and plant breeding	4	8
		BOT-502	Practical	1	
	Honours	BOT-503	Molecular Biology and Biotechnology	2	
		BOT-504	Practical	1	
VI	Pass	BOT-601	Cell Biology and Genetics	4	10
		BOT-602	Practical	1	
	Honours	BOT-603	Choice Based Credit System a) Angiosperm Taxonomy b) Methodology and Perspective of Science c) Plant Biotechnology d) Forestry e) Mushroom Cultivation f) Horticulture	3	
		BOT-604	Project Work	2	

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Department Of Chemistry

B.Sc. Course Structure Subject : Chemistry

Semester		Course Number	Course Name	Credits	Total Credits
I	Pass	CHEM-101	Inorganic (Theory)	4	8
		CHEM-102	Inorganic (Practical)	1	
	Honours	CHEM-103	Inorganic (Theory)	2	
		CHEM-104	Inorganic (Practical)	1	
II	Pass	CHEM-201	Organic (Theory)	4	8
		CHEM-202	Organic (Practical)	1	
	Honours	CHEM-203	Organic (Theory)	2	
		CHEM-204	Organic (Practical)	1	
III	Pass	CHEM-301	Physical (Theory)	4	8
		CHEM-302	Physical (Practical)	1	
	Honours	CHEM-303	Physical (Theory)	2	
		CHEM-304	Physical (Practical)	1	
IV	Pass	CHEM-401	Inorganic (Theory)	4	8
		CHEM-402	Inorganic (Practical)	1	
	Honours	CHEM-403	Quantum Chemistry & Molecular Spectroscopy	2	
		CHEM-404	Advanced Practical-I (Physical, Inorganic and Organic)	1	
V	Pass	CHEM-501	Organic (Theory)	4	8
		CHEM-502	Organic (Practical)	1	
	Honours	CHEM-503	Analytical Chem & Applications of Spectroscopy.	2	
		CHEM-504	Advanced Practical-II (Physical, Inorganic and Organic)	1	
VI	Pass	CHEM-601	Physical (Theory)	4	10
		CHEM-602	Physical (Practical)	1	
	Honours	CHEM-603	Choice Based Credit Paper a. Biological Chemistry b. Nano Chemistry c. Medicinal Chemistry d. Environmental and Green Chemistry	3	
		CHEM-604	Project Work	2	

* Choice based credit paper will be offered depending on the availability of specialized teacher in the respective colleges

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Department of Chemistry

CHEM -603 Choice Based Credit Paper (Honours Course -Theory)

The Elective papers selected are:

1. Biological Chemistry
2. Nano Chemistry
3. Environmental and Green Chemistry
4. Medicinal Chemistry

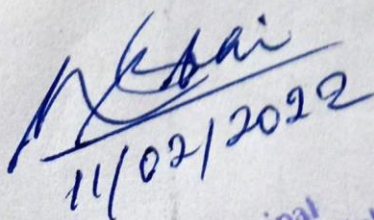
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Department of Geology

B.Sc. (PASS & HONOURS) SYLLABUS IN GEOLOGY

1 st Semester	
Geol-101 (P&H)	Physical and Structural Geology
Geol-102 (P&H)	Practical on Physical and Structural Geology
Geol-103 (H)	Physics and Dynamics of the Earth
Geol-104 (H)	Practical on Physics and Dynamics of the Earth
2 nd Semester	
Geol-201 (P&H)	Crystallography and Mineralogy
Geol-202 (P&H)	Practical on Crystallography and Mineralogy
Geol-203 (H)	Geomorphology, Remote Sensing and Engineering Geology
Geol-204 (H)	Practical on Geomorphology, Remote Sensing and Engineering Geology
3 rd Semester	
Geol-301 (P&H)	Igneous and Metamorphic Petrology
Geol-302 (P&H)	Practical on Igneous and Metamorphic Petrology
Geol-303 (H)	Advanced Structural Geology and Hydrogeology
Geol-304 (H)	Practical on Advanced Structural Geology and Hydrogeology
4 th Semester	
Geol-401 (P&H)	Palaeontology and Stratigraphy
Geol-402 (P&H)	Practical on Palaeontology and Stratigraphy
Geol-403 (H)	Exploration & Mining Geology and Energy Resources
Geol-404 (H)	Practical on Exploration & Mining Geology and Energy Resources
5 th Semester	
Geol-501 (P&H)	Sedimentary Petrology and Environmental Geology
Geol-502 (P&H)	Practical on Sedimentary Petrology and Fieldwork
Geol-503 (H)	Advanced Palaeontology and Indian Stratigraphy
Geol-504 (H)	Practical on Advanced Palaeontology and Indian Stratigraphy
6 th Semester	
Geol-601 (P&H)	Economic Geology and Indian Mineral Resources
Geol-602 (P&H)	Practical on Economic Geology and Indian Mineral Resources
Geol-603 (H)	Elective Paper (any one) (i) Advanced Remote Sensing and GIS (ii) Geology and Mineral Resources of Nagaland
Geol-604 (H)	Practical on Elective Papers
Geol-605 (H)	Geological Fieldwork


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Department of Zoology

Semester	Course number	Name of paper	Credits	Total	
I	Pass	ZOO-101	Introduction to Non-Chordates (Theory)	4	8
		ZOO-102	Introduction to Non-Chordates (Practicals)	1	
	Honours	ZOO-103	Evolutionary Biology and Animal Behaviour (Theory)	2	
		ZOO-104	Evolutionary Biology and Animal Behaviour (Practicals)	1	
II	Pass	ZOO-201	Chordates and Evolution (Theory)	4	8
		ZOO-202	Chordates and Evolution (Practicals)	1	
	Honours	ZOO-203	Immunology and Biostatistics (Theory)	2	
		ZOO-204	Immunology and Biostatistics (Practicals)	1	
III	Pass	ZOO-301	Cell and Molecular Biology I (Theory)	4	8
		ZOO-302	Cell and Molecular Biology I (Practicals)	1	
	Honours	ZOO-303	Cell and Molecular Biology II (Theory)	2	
		ZOO-304	Cell and Molecular Biology II (Practicals)	1	
IV	Pass	ZOO-401	Developmental Biology and Physiology (Theory)	4	8
		ZOO-402	Developmental Biology and Physiology (Practicals)	1	
	Honours	ZOO-403	Chordates and Physiology (Theory)	2	
		ZOO-404	Chordates and Physiology (Practicals)	1	
V	Pass	ZOO-501	Biochemistry and Genetics (Theory)	4	8
		ZOO-502	Biochemistry and Genetics (Practicals)	1	
	Honours	ZOO-503	Genetics/Applied Zoology/ Environmental Management (Theory)	2	
		ZOO-504	Genetics/Applied Zoology/ Environmental Management (Practicals)	1	
VI	Pass	ZOO-601	Ecology and Applied Zoology (Theory)	4	10
		ZOO-602	Ecology and Applied Zoology (Practicals)	1	
	Honours	ZOO-603	Choice Based Credit Paper. (NOTE: Colleges have the option of offering any paper relevant to zoology based on their manpower and infrastructure).	3	
		ZOO-604	Project work	2	

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Semester VI (Honours)

THEORY

ZOO-603: (Choice Based Credit System)

Colleges have the option of offering any paper relevant to zoology based on their manpower and infrastructure. Some broad topics are mentioned below as probable themes/topics.

Biotechnology
Genetic Engineering
Microscopy and Chromatography
Pisciculture
Aquaculture
Sericulture
Biodiversity

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Tabulated list of programs in which CBCS elective course system implemented in the last academic year showing sl. No, list of

SL. No	Programs	Course Number	Name of the Paper	YEAR
1	B.Sc Chemistry Honours	CHEM-603	Environmental and Green Chemistry	2021
2	BSc Botany Honours	BOT-603	Forestry	2021
3	BSc Geology Honours	GEOL-603	Geology and Mineral resources of Nagaland	2021
4	BSc Zoology Honours	ZOO-603	Aquaculture	2021