

NAAC

Revised Format of Self-Study Report

(As per the NAAC Manual for Universities effective from July, 2017)

Qualitative Metrics to seek Descriptive data from Department
of
ZOOLOGY

CRITERION I– CURRICULAR ASPECTS		
KeyIndicator-1.1Curriculum Design and Development		
Metric No. (as per NAAC Manual)	Description (as per NAAC Manual, July-2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)
1.1.1	Curricula developed/adopted Relevant to local/national/global needs; program outcomes, course outcomes.	Supporting Document required: A description in not more than 200 words of any Curricula developed/adopted from 2012-13to 2016-2017 in the Department/Centre which is relevant to local / national/ Global needs. NIL
Key Indicator-1.3 Curriculum Enrichment		
1.3.1	Integration of cross-cutting issues Relevant to Gender, Environment and sustainability, Human values, Professional Ethics into curriculum.	Supporting Documents required: A description of courses which address Gender, Environment and Sustainability, Human Values and Professional Ethics List in not more than 200 words. The list of Core Courses offered by the Department. NIL

Criterion II-Teaching-Learning and Evaluation

Key Indicator-2.2 Catering to Student Diversity

Metric No. (as per NAAC)	Description (as per NAAC Manual, July 2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)
2.2.1	The institution assesses the learning levels of the students, after admission and organizes special programs for advanced learners and slow learners	<p style="text-align: center;">Supporting Document required:</p> <p>Describe the initiatives taken by the Department in not more than 200 words.</p> <ul style="list-style-type: none"> • Teachers follow continuous evaluation system for most of the courses • For PG courses two tests mid semester and end semester examinations are conducted; for M.Phil. Courses presentations, assignments followed by examination and dissertation submission; and for Ph.D. course work followed by examination and thesis submission are being followed. • Examinations are conducted as per schedule and results are declared on time. • Students are shown evaluated answer scripts for mid semester examination (Internal Assessment) • Question papers are set by board of examiners and moderated by the Moderation Committee. • We do take steps for slow and advanced learners. For slow learner student who is not able to understand any topic in the classroom due to limited understanding, we encourage them to spend time with the teacher of concerned subject and try our best to explain it for better understanding. • For advanced learner, we try to explain their query based on scientific literature available. These students are motivated towards learning of the topic in depth and details. <p style="text-align: center;"><i>We do not have any documentary evidence for above mentioned steps as these are common practices followed by all the faculty members in the department.</i></p>

Key Indicator-2.3 Teaching-Learning Process

2.3.1	Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences	<p style="text-align: center;">Supporting Document required:</p> <ul style="list-style-type: none">• Department provides Academic Calender of teaching and learning process well in advance of sessions• Student centric learning through extensive use of ICT tools. • Blending learning with e-resources through available free access to Library internet. • Enrichment of learning experiences through mandatory practical class wherein students are given hands on experience in various techniques, shown videos and simulations for biological phenomena. Students are encouraged for seminar presentations, field and project work in more than 90% courses. • Fostering the culture of knowledge acquisition through wider self exposure to latest knowledge through the library and on-line subscribed books and journal. • Exposing the students to internationally as well as nationally renowned scientists. Many Scientists of International acclaim visit Department of Zoology as they collaborate with the faculty members. We conduct their lectures followed by discussion with students. Students participate in good strength in such lectures and participate with full involvement by asking interesting questions. Documentary evidence is attached herewith for reference. <p style="color: red;">Please see Annexure 2.3.1</p>
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Key Indicator-2.6 Student Performance and Learning Outcomes

2.6.1	Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed on website and communicated to teachers and students	<p style="text-align: center;">Supporting Documents required:</p> <p>(i) COs for all courses (Examples can be seen from attached Glossary-Notes) Average percentage of attendance of students 2009 - 2014: 80-86% 2014 –2015: 83%</p> <p>At the Department level for every course the attendance is monitored and average attendance for all courses for mentioned year is 83%</p> <p>(ii) A description of Mechanism of Communication in not more than 100 words</p> <ul style="list-style-type: none">• At the outset a orientation program is held where the students are intimated about the PO, PSO and CO's offered by the department.• The course structure, contents, methods of evaluation, minimum attendance requirement, and method of assessment is explained to students at the time of orientation.• The above information is available to all students and faculty members at the University website as 'syllabus for M.Sc in Zoology'.
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2.6.2

Attainment of program outcomes, program specific outcome and course outcomes are evaluated by the institution

Supporting Documents required:

A description of the method of measuring attainment of POs, PSOs and COs and the level of attainment of POs, PSOs and COs in not more than 200 words.

- Examinations shall be conducted at the end of each semester as per the Academic Calendar notified by the University of Delhi.
- Each course will carry 150 marks and will have two components:

(i)	Internal Assessment	30 marks.
(a)	Attendance	5 marks
(b)	Theory	25 marks
(ii)	End-Semester Examination	120 marks.
(a)	Theory Examination	70 marks
(b)	Practical Examination	50 marks

The system of evaluation is as follows:

Internal assessment will be broadly based on attendance in Theory and Practicals (5 marks), assignments, seminars and tests in the theory component (25 marks). These criteria are tentative and could be modified based on guidelines approved by the academic council.

As regards Dissertation, the scheme of evaluation shall be as follows:

- Project work would be assigned at the end of Semester II to enable students to initiate work on the same.
- It would formally begin from Semester III and shall be theoretical in nature. This component would be evaluated for 100 marks.
- There shall be a viva-voce examination (conducted by a board of faculty members) at the end of Semester IV on the Dissertation that shall be evaluated for 50 marks.

Examinations for courses shall be conducted only in the respective odd and even Semesters as per the Scheme of Examinations. Regular as well as Ex-students shall be permitted to appear/re-appear/improve in courses of Odd Semesters only at the end of Odd Semesters and courses of Even Semesters only at the end of Even Semesters.

PASS PERCENTAGE

- Minimum marks for passing the examination in each semester shall be 40% in each paper and 45% in aggregate of a semester.
- However, a candidate who has secured the minimum marks to pass in each paper but has not secured the minimum marks to pass in aggregate may reappear in any of the paper/s of his choice in the concerned semester in order to be able to secure the minimum marks prescribed to pass the semester in aggregate.
- No student would be allowed to avail of more than two chances to pass a paper inclusive of the first attempt.

PROMOTION CRITERIA

SEMESTER TO SEMESTER: Students shall be required to fulfill the Part to Part Promotion Criteria. Within the same Part, students shall be allowed to be promoted from a Semester to the next Semester, provided she/he has passed at least half of the courses of the current semester.

PART I TO PART II: Admission to Part II of the programme shall be open to only those students who have successfully passed at least 75% papers out of papers offered for the Part I courses comprising of Semester-1 and Semester-2 taken together. However, she/he will have to clear the remaining papers while studying in Part-II of the programme.

DIVISION CRITERIA

Successful candidates will be classified on the basis of combined results of Part-I and Part-II examinations as follows:

Candidates securing 60% and above :Ist Division

Candidates securing between 49.99% and 59.99% :IIInd Division

All others : Pass

		<p>SPAN PERIOD No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of three years from the date of admission to the Part-I/Semester-I of the M.Sc. – Zoology Programme.</p> <p>ATTENDANCE REQUIREMENT No student shall be considered to have pursued a regular course of study unless he/she is certified by the Head of the Department of Zoology, University of Delhi, to have attended 75% of the total number of lectures and seminars conducted in each semester, during his/her course of study. Provided that he/she fulfils other conditions, the Head, Department of Zoology, may permit a student to the next Semester who falls short of the required percentage of attendance by not more than 10% of the lectures and seminars conducted during the Semester.</p>
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Criterion III- Research, Innovations and Extension

3.6.1	Extension activities in the neighbourhood community, if any, in terms of impact and sensitising students to social issues and holistic development during the last five years.	<p>Supporting Document Required:</p> <ul style="list-style-type: none">• 4-5 short term training workshops for research scholars, college teachers are organised in the Department every year.• Most of the faculty in the department provide opportunity for research to undergraduate students from various universities like DU, BHU, Amity, Bhartisadan, Trichy, ICB Kolkatta, etc. during summer vacation.• Outreach program for school students and farmers are conducted on regular basis by the Department of Zoology.• This year 10 Lectures by eminent Scientists in various areas of biological sciences (International and National) were organised and was attended by students and faculty of various Departments and Colleges of University of Delhi, JNU, IGIB,etc.• 3-4: Outreach program for farmers to educate them fish farming. A farmer can often integrate fish farming into the existing farm to create additional income and improve its water management. Fish growth in ponds can be controlled for their nutritive value and better yield. Outreach programme from the department tremendously helps them in fish farming and of course to the consumers due to good quality of fish. Please see Annexure 3.6.1 Fish Farming• Students help class 10-12th level kids from very poor background for maths and science subject at Delhi University Women's Association.• Some students take care of well being of stray animals on campus.
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CRITERION IV: Infrastructure and Learning Resources

Key Indicator-4.1 Physical Facilities

Metric No. (as per NAAC Manual)	Description (as per NAAC Manual, July 2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)																	
4.1.1	Facilities for teaching - learning available in Dept. / Centre as per the minimum specified requirements by the statutory bodies.	<p>We have adequate facilities for teaching by way of class rooms, laboratories, seminar halls and computers.</p> <p style="text-align: center; color: red;">Pictures attached as Annexure 4.1.1</p> <p>Laboratories (mention number and room size in mtr./ square), Computing equipment (mention only number), etc.</p>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Facilities</th> <th style="width: 25%;">Existing</th> <th style="width: 25%;">Total</th> </tr> </thead> <tbody> <tr> <td>Class rooms (20X40 feet)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Laboratories (20X50 feet)</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Seminar Halls (~120 seater)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Computers</td> <td style="text-align: center;">~100</td> <td style="text-align: center;">~100</td> </tr> </tbody> </table>	Facilities	Existing	Total	Class rooms (20X40 feet)	3	3	Laboratories (20X50 feet)	5	5	Seminar Halls (~120 seater)	1	1	Computers	~100	~100	
Facilities	Existing	Total																	
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Seminar Halls (~120 seater)	1	1																	
Computers	~100	~100																	
4.1.2	The institution has adequate Facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.) and cultural activities.	<p>Supporting Document Required:</p> <p>A Description in not more than 200 words on adequate facilities for sports, games and cultural activities which include specification about area/size, year of establishment and user rate.</p> <p style="text-align: center;">NIL</p>																	

CRITERION V: STUDENT SUPPORT AND PROGRESSION

Key Indicator-5.4 Alumni Engagement

Metric No. (as per NAAC Manual)	Description (as per NAAC Manual, July 2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)
5.4.1	The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial And non-financial means during The last five years	Supporting Document Required: A Description in not more than 200 words on how the alumni association contributes to the institution NIL

Criterion VI: Governance, Leadership and Management

Key Indicator-6.1 Institutional Vision and Leadership

Metric No. (as per NAAC Manual)	Description (as per NAAC Manual, July 2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)
6.1.2	The institution practices decentralization and participative management	Supportive Documents Requirement: Describe any one case study of practicing decentralization and participative management in the institution in not more than 200 words. NIL

Criterion VII– Institutional Values and Best Practices

Key Indicator-7.1 Institutional Values and Social Responsibilities

Metric No. (as per NAAC Manual)	Description (as per NAAC Manual, July 2017, for Reference purposes)	Data Requirement from Department (For Academic years 2012-13 to 2016-17)
7.1.1.2	<p style="text-align: center;">Institution shows gender sensitivity in providing facilities such as:</p> <p style="text-align: center;">a) Safety and Security b) Counselling c) CommonRoom</p>	<p>Supporting Document Required for uploading: A Description of gender equity initiatives undertaken by the Department on the specified areas in not more than 200 words.</p> <ul style="list-style-type: none"> • Sexual harassment committee • Anti-Ragging committee • Security guards for 24 x 7 <p style="color: red;">Attached as Annexure 7.1.1.2</p>

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7.1.2 Environmental Consciousness and Sustainability		
7.1.2.3	Waste Management steps	<p>Biological waste management and their disposal according to norms of IAEC. Minimize (where ever possible) use of plastic disposables. Proper segregation of waste products and their disposal according to norms of IAEC.</p>
7.1.2.4	Rain water harvesting structures and utilization in the department	<p style="text-align: center;">Supporting Document Required: Provide a description of efforts towards rain water harvesting on the department in not more than 200 words.</p> <p style="text-align: center;">NIL</p>

7.1.2.5	Green Practices	<ul style="list-style-type: none"> • 50-60: In Swachata abhiyan wherein students give shramdan for few hours to keep their department and campus clean. • Students and staff use public transport for commutation. • Minimize (where ever possible) use of plastic. • Green landscaping and zero tolerance to smoking. <p>Attached as Annexure 7.1.2.5</p>
Key Indicator-7.2 Best Practices		
7.2.1	State atleast two institutional best practices (as per NAAC format)	<ul style="list-style-type: none"> • Autonomy-supportive teaching styles are followed by many faculty members, which improve student motivation, encourage independent thought and critical thinking. Relevant skills are developed through direct experimentation and educational trips to make learning appropriate. • Research students with the involvement of M.Sc. students started Zoological Society as well as lunched a departmental Magazine. This years magazine covered the research highlights of the department along with regular articles and quiz section.
Key Indicator-7.3 Institutional Distinctiveness		
7.3.1	Describe/Explain the performance of the institution in one area distinctive to its vision, priority And thrust.	<p style="text-align: center;">Supporting Document Required:</p> <p style="text-align: center;">A Description of the Departments performance in any one are a distinctive to its vision, priority and thrust in not more than 200 words.</p>

The Department of Zoology was established as a premier centre of teaching and research in animal sciences in 1947 with Dr. M.L. Bhatia as the first head of the department. In 1963, it was recognized as the Centre for Advanced Studies (CAS) and continues to enjoy this status by special assistance of the UGC-SAP program. UGC extended its CAS status in 2011 by providing special assistance for another five years. The department has created a central-instrument facility through the generous support of the University and also from DST-FIST program grants.

In the 70 years of its existence, the department is credited for producing several post-graduate students and awarding nearly 550 doctoral degrees. Its alumni are doing exceptionally well as teachers and scientists at various universities and research laboratories in India and abroad. The academic training imparted to the department's M.Sc. students, equips them to enter doctoral programs of leading institutes in the country and abroad.

The current research and teaching in the Department include various aspects of Animal Physiology, Entomology, FishBiology, Immunology, Developmental Biology, Cell Signalling, Cell Biology, Radiation Biology, Reproductive Biology and Endocrinology. Apart from teaching, the faculty has been publishing papers in peer-reviewed research journals. More than 53 papers have been published in last academic years. The department practices interdisciplinary research. Faculty members are presently collaborating with leading institutes of the country like IMTECH, IARI, TERI, NEERI, IGIB, NII, NIHF, ICGEB, NIT etc.

Faculty members have received many prestigious awards and honors. In 2007, two faculty members were elected as fellows of the National Academy of Agricultural Sciences. Faculty members are also on the editorial board and/or adhoc reviewers for many prestigious national and international journals and members of project advisory committees (PAC) of DST and DBT. All faculty members have extramural funding for their research projects and the Department has international collaborations with Austria (FAO/IAEA), Germany (DST DAAD) project and Switzerland (Indo-Swiss).

The Department has been holding various workshops, symposia, conferences and other teaching courses to provide a platform for scientific exchanges. Keeping pace with time, the faculty members along with fellow colleagues from various colleges of the University revised B.Sc. Zoology (Honors) syllabus in 2003. Department organizes workshops for college teachers to make them adept with current trends in various aspects of animal sciences.

Apart from teaching and research, the Faculty members are making substantial contribution to the University system in various capacities. Three faculty members hold senior administrative responsibilities in the University (Director-South Campus, Director-CIC and Dean-Examinations). To further strengthen teaching and research in the Department, an extensive renovation and up-gradation of teaching and research laboratories have been undertaken.

The department has made remarkable strides during the past 70 years and is committed to continue working hard for excellence in Science.