## SELF ASSESSMENT REPDRT

## Department of Chemistry Shaheed Benazir Bhutto University Sheringal



## Submitted to <br> Quality Enhancement Cell <br> Shaheed Benazir Bhutto University Sheringal

Program Team Members:

1. Dr. Abdul Khaliq Jan
2. Mr. Nasir Ud Din
3. Mr. Kashif Raza


## University Mission and Objectives:

1. To enlighten the darkness of this remote area through education.
2. To preserve \& conserve the "Natural Resources" of this area through human resource development.
3. To enlighten the youngsters, Girls \& Boys with educational power to serve the nation in various fields.
4. To act as an "Intellectual Fort" against anti-state mentality through education.
5. To make the University one of the best institutes for learning and research

## Department of Chemistry:

The Department of Chemistry was established in August, 2013. Presently, the Department offers BS (Hons),
M..Sc and M.Phil programs. The Department is furnished by all the modern research instruments/equipment's i.e. UV, HPLC, deionizer, rotary evaporator, fume hood, sonicator, various pH meters, melting point apparatus, polarimeter, soxhlet apparatus, assembly for extraction and isolation etc. The department is highly equipped with all sorts of chemicals and books. The department has rich sources and resources for phytochemistry. We hope that it would be an excellent center of learning and research in near future and would contribute to the development of the area and in turn the country.
This Self Assessment Report (SAR) of the Chemistry Department has been prepared in the light of eight (8) criteria and associated standards as per guidelines in the Self Assessment Manual of HEC, Pakistan.

## Program Vision:

To establish a center of excellence in chemistry in which research in advance level could be carried out. The department of chemistry will be recognized for excellence by its students and faculty.

## Program Mission:

The mission of the Department of Chemistry is to provide an innovative educational program that is challenging as well as flexible and supportive. The program is designed to meet the challenges that our graduates are likely to face throughout their professional careers and to provide with highly-developed skills in lifetime learning, planning, problem-solving, communication and leadership
Standard 1-1: The program must have documented measurable objectives that support faculty / college and institution mission statements

## Program Objectives:

1. To provide high quality academic support to strengthen the Chemistry and related applied areas.
2. To identify problems and their targetable solutions.
3. To develop their creative and management skills.
4. To work with collaborative and creative approach in the task oriented goals.
5. Demonstrate good communication skills both in report writing and in technical presentations.
6. To keep them aware about ethical and social values.
7. To provide a broad, innovative, and quality education in all areas of Chemistry
8. To prepared students for either advanced studies in chemistry or other related graduate programs, or careers in industry

## Strategic Plan for Achieving Program Mission and Objectives:

- Curriculum design and Strengthening of Faculty.
- Online lectures and literature review facilities.
- Organizing seminars, workshops and other activities.
- Study tours of various industries and research institutes of Pakistan

Standards1-2: The program must have documented outcome for graduating students .It must be demonstrated that the outcome support the program objective and that graduating students are capable of performing these outcomes.
The outcomes of this program are as under
To meet the Program Objectives, the Department of Chemistry will graduate professional, competent chemists who will be able to demonstrate the following measurable outcomes:

1. Graduates will be able to utilize their skills in chemical and other allied sciences.
2. Graduates will be able to work in groups.
3. A proficiency in chemistry and basic sciences including mathematics, and computer skills.
4. A proficiently in chemical science concepts covering all areas of basic chemical concepts.
5. The ability to characterize the properties of various compounds, using the experimental techniques.
6. The ability to express thoughts and ideas through oral, written, and computer communications.

## Objective vs Outcomes

| PROGRAMME OBJECTIVES | OUTCOMES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| To provide high quality academic environment to strengthen the Chemistry and related applied areas. |  | * | * |  |  | * |
| To identify problems and their targetable solutions. | * |  |  |  |  |  |
| To develop their creative and management skills. | * |  |  |  |  |  |
| To work with collaborative and creative approach in the task oriented goals. | * | * | * | * |  |  |
| Demonstrate good communication skills both in report writing and in technical presentations. |  |  |  |  |  | * |
| To keep them aware about ethical and social values. | * |  |  |  |  |  |
| To provide a broad, innovative, and quality education in all areas of Chemistry | * |  |  |  | * |  |
| To prepared students for either advanced studies in chemistry or other related graduate programs, or careers in industry | * |  |  | * | * |  |

Standard 1-3: The results of programs assessment and the extent to which they are used to improve the program must be documented

Since this is first time the self-assessment is carried out by the department, the Program objectives assessment will be carried out during the next semester.
Standard 1-4: The department must assess its overall performance periodically using quantifiable measures.
Present students' enrolment (BS Chemistry)

| Year | Enrollment |
| :---: | :---: |
| 2013 | 19 |
| 2014 | 13 |



A curriculum is designed and organized to achieve the program's objectives and outcomes. Curriculum standards are specified in terms of credit hours of study. A semester credit hour equals one class hour or two to three lab hours per week. The semester is approximately fifteen weeks. Curriculum design and organization information provided below for BS (Chemistry) program.

Standard 2-1: The curriculum must be consistent and supports the program's documented objectives
The curriculum is consistent and supports the program's documented objectives.

| Courses/Group of courses | Objectives |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $1 \& 2$ | 3\&4 | 5\&6 | 7\&8 |
| ENG-100 English-I (Functional)/ GEN-100 General-I/MATH-100 Mathematics-I Functional Biology/MATH-200 Mathematics-II/Functional/Biology/University Optional/CHEM-161 Organic Chemistry/CHEM-151 Inorganic Chemistry/CHEM-141 Environmental Chemistry /CHEM-171 Physical Chemistry | * | * |  |  |
| ENG-200 English-II (Functional) /ENG-300 English-III (Report Writing) GEN-300 Pakistan studies/ GEN-200 Islamic Studies / Ethics COMP-100 Computer and Its Applications in Chemistry/ GEN-201 General-III |  |  | * |  |
| Specialization (Inorganic/ Organic/Physical/Applied/ Analytical/Bio Chemistry Research Project / Advanced Practical / Position Paper (literature survey) |  |  |  | * |

## Standard 2-2: Theoretical background, problems analysis and solution design must be stressed within the program's core material.

Applications of mathematics \& Statistic offer in the program to solve the problem of mathematical \& Statistical calculations.

| Course | Percentage |
| :--- | :---: |
| Core Subjects | 76 |
| Basic Sciences \& Humanities subjects | 24 |

Standard 2-3: The curriculum must satisfy the mathematics and basic sciences requirements for the program as specified by the respective accreditation body

The curriculum satisfies the core requirements for the program as specified by the accreditation body. Minimum requirements of credit hours for BS (Forestry) program

| Sr.\# | Category |  | Credit Hours |
| :---: | :---: | :---: | :---: |
| Credit Hours |  |  |  |
| $\mathbf{3} \mathbf{1}$ | Chemistry Courses | Core Courses | $\mathbf{3} \mathbf{1 2 4}$ |
|  | Electives Courses | 76 |  |
|  | Supporting Courses | 10 |  |
| $\mathbf{2}$ | University Electives | 8 | $\mathbf{8}$ |
| Total Credit Hours |  | $\mathbf{1 3 2}$ |  |

Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by the respective accreditation body

The curriculum satisfies the core requirements for the program as specified by HEC same as above. The curriculum in the program is fully satisfied the major requirements of the program.
Standard 2-5: The curriculum must satisfy humanities, social sciences, arts, ethical, professional and other discipline requirements for the program as specified by the respective accreditation body

The curriculum satisfies general education, arts, and professional and other discipline requirements for the program. The following table shows how the BS Chemistry program satisfies requirements in standards 2-3, $2-4$ and $2-5$. It's clear from the table that all requirements are met.

| S.No | Category | Credit Hours |  |
| :---: | :--- | :---: | :---: | Credit Hours

## BS (Chemistry) Program

| Program Duration: | 4 years | Teaching System: | Semester System |
| :--- | :--- | :--- | :---: |
| Admission Criteria: | F.Sc | Total Seats: | 30 |

SEMESTER-I

| Course Code | Course Title |  | Credit Hours |  |
| :---: | :--- | :---: | :---: | :---: |
|  |  | Theory | Practical |  |
| ENG-100 | English-I (Functional) | 3 | 0 |  |
| GEN-100 | General-I | 3 | 0 |  |
| GEN-101 | General-II | 3 | 0 |  |
| MATH-100 | Mathematics-I/Functional Biology | 3 | 0 |  |
| COMP-100 | Computer and Its Applications in Chemistry | 3 | 0 |  |
| CHEM-151 | Inorganic Chemistry | 3 | 1 |  |
| Total Credit Hours=21+1=22 |  |  |  |  |

## SEMESTER-II

| Course Code Course Title | Credit Hours |  |  |
| :---: | :--- | :---: | :---: |
|  |  | Theory | Practical |
| ENG-200 | English-II (Functional) | 3 | 0 |
| GEN-200 | Islamic Studies / Ethics | 2 | 0 |
| GEN-201 | General-III | 3 | 0 |
| MATH-200 | Mathematics-II/Functional/Biology/University Optional | 3 | 0 |
| STAT-100 | Statistics | 3 | 0 |
| CHEM-161 | Organic Chemistry | 3 | 1 |
| Total Credit Hours= 17 +1+ 18 |  | $\mathbf{1 7}$ | $\mathbf{1}$ |

## SEMESTER-III

| Course Code Course Title | Credit Hours |  |  |
| :---: | :--- | :---: | :---: |
|  |  | Theory | Practical |
| ENG-300 | English-III (Report Writing) | 3 | 0 |
| GEN-300 | Pakistan Studies | 2 | 0 |
| GEN-301 | General-IV | 3 | 0 |
| GEN-302 | General-V | 3 | 0 |
| CHEM-141 | Environmental Chemistry | 2 | 0 |
| CHEM-171 | Physical Chemistry | 3 | 1 |
| Total Credit Hours= $\mathbf{1 7}+\mathbf{1 + 1 8}$ |  | $\mathbf{1 6}$ | $\mathbf{1}$ |

SEMESTER-IV

| Course Code | Course Title | Credit Hours |  |
| :---: | :---: | :---: | :---: |
|  |  | Theory | Practical |
| ENG-400 | English-IV / University Optional | 3 | 0 |
| GEN-400 | General-VI | 3 | 0 |
| GEN-401 | General-VII | 3 | 0 |
| CHEM-111 | Analytical Chemistry | 2 | 0 |
| CHEM-121 | Industrial Chemistry | 2 | 0 |
| CHEM-131 | Biochemistry | 2 | 0 |
|  | Total Credit Hours= 15 | 15 | 0 |
| SEMESTER-V |  |  |  |
| Course Code | Course Title | Credit Hours |  |
|  |  | Theory | Practical |
| CHEM-251 | Inorganic Chemistry | 3 | 1 |
| CHEM-261 | Organic Chemistry | 3 | 1 |
| CHEM-271 | Physical Chemistry | 3 | 1 |
| CHEM-211 <br> CHEM-231 | Analytical-/ Bio-Chemistry | 3 | 1 |
|  | Total Credit Hours= 12+4=16 | 12 | 4 |

SEMESTER-VI

| Course Code | Course Title |  | Credit Hours |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Theory | Practical |  |
| CHEM-351 | Inorganic Chemistry | 3 | 1 |  |
| CHEM-361 | Organic Chemistry | 3 | 1 |  |
| CHEM-371 | Physical Chemistry | 3 | 1 |  |
| CHEM-311 <br> CHEM-331 | Analytical--1 <br> Bio-Chemistry | 3 | 1 |  |
| Total Credit Hours=12+4=16 |  | $\mathbf{1 2}$ | $\mathbf{4}$ |  |

SEMESTER-VII

| Course Code | Specialization (Inorganic/ Organic/Physical/ <br> Applied/ Analytical/Bio Chemistry) | Credit Hours |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Theory | Practical |
|  | Paper-I | 3 | 0 |  |  |  |
|  | Paper-I I | 3 | 0 |  |  |  |
|  | Paper-I II | 3 | 0 |  |  |  |
|  | Practical-I | 0 | 1 |  |  |  |
| Elective Course-I (other than the field of specialization) |  |  |  |  |  |  |
| Research Project / Advanced Practical / Position Paper (literature survey) |  | 0 | 2 |  |  |  |
|  |  |  |  |  |  |  |

SEMESTER-VIII

| Course Code | Specialization (Inorganic/ Organic/Physical// <br> Applied/ Analytical/Bio Chemistry) | Credit Hours |  |
| :--- | :--- | :---: | :---: |
|  | Paper-I V | Theory | Practical |
|  | Paper-IV | 3 | 0 |
|  | Paper-VI | 3 | 0 |
|  | Practical-I I | 3 | 0 |
|  | 0 | 1 |  |
| Elective Course-I (other than the field of specialization) |  |  |  |
| Research Project / Advanced Practical / Position Paper (literature survey) | 0 | 2 |  |
| Total Credit Hours=12+4=16 |  |  |  |

Standard 2-6: Information technology component of the curriculum must be integrated throughout the program

Information technology component is given important in the curriculum. As information technology is very important and play very vital role in Higher Education, for this purpose improvement is needed in this area.

| Course for IT | Semester |
| :---: | :---: |
| Computer and Its Applications in Chemistry | Semester-I |

Standard 2-7: Oral and written communication skills of the students must be developed and applied in the program

Oral and written communication has been given importance in the program. To develop the oral and written communication skills of students, some courses relating to it have been included in the program. The following courses, of English have been included in the syllabus.

| Courses for oral and written skills | Semester |
| :---: | :---: |
| ENG-100 English-I | Semester-I |
| ENG-200 English-II | Semester-II |
| ENG-300 English-III ( Report Writing) | Semester-III |
| ENG-400 English-IV/University Optional | Semester-IV |

CRITERION 3
LABORATERIES AND COMPUTING FACULITIES

The chemistry Department offers BS degrees in Chemistry. The designed curriculum for Chemistry program provides a fundamental knowledge in the major areas of Chemistry.

There are 10 laboratories in the department of chemistry. The detail regarding area, adequacy for Instruction, major apparatus/equipments and safety regulations is as under:

## Laboratory Safely

- Wearing white cotton laboratory coat or overall during lab work is must. Without lab. Coat, students will not be allowed to enter and work in the laboratories.
- For safety reasons, wearing fabrics made of synthetic materials should be avoided. Both for safety reasons and good manners of the society, male students under chadar and gold jewelry are not allowed.
- Because of chemical toxicity, taking food and drinking water inside the laboratories is not recommended.
- Taking away glassware, chemicals, equipments etc from one laboratory to another without permission in writing from the Chairman is strictly prohibited.
- Students are expected to avoid visiting other laboratories (other than the assigned one) during working hours. In case of urgency, please take prior permission or consult the instructor of your own laboratory.
- Accident or Emergency: On such occasions after hearing the bell, everyone is required to rush and assemble in the entrance gate but avoid panic.

Standard- 3-1: (Lab manuals/documentation/instruction for experiments must be available and readily accessible to faculty and students.

| S.No | Lab Title | Capacity of Students | Location |
| :---: | :--- | :---: | :--- |
| 1 | Organic Chemistry Lab-I | 10 | SHARC Labs |
| 2 | Organic Chemistry Lab -II | 10 | SHARC Labs |
| 3 | Inorganic Chemistry Lab-I | 20 | Old Academic Building SBBU |
| 4 | Inorganic Chemistry Lab-II | 20 | Old Academic Building SBBU |
| 5 | Biochemistry Lab-I | 20 | SHARC Labs |
| 6 | Analytical chemistry Lab-I | 20 | SHARC Labs |
| 7 | Physical Chemistry Lab-I | 20 | Old Academic Building SBBU |
| 8 | Computer Lab | 20 | Old Academic Building SBBU |
| 9 | Seminar Library | 20 | SHARC Building |
| 10 | Store for Chemicals | SHARC Labs |  |

Objectives of Labs: To train and support students in Chemistry and related applied areas.
Standard 3-2: There must be adequate support personal for instruction and maintaining the computing laboratories

There is very limited lab support in terms of personnel. There is only one lab technician in the department of chemistry.

Standard 3-3: The university computing infrastructure and facilities must be adequate to support programs objectives.

All faculty members and students have adequate access to computing facilities.

## CRITERION 4

 STUDENTS SUPPORT \& ADVISINGThe students are provided full support to complete the program in timely manner. The faculty members are available during office hours and students are encouraged to consult them in case they have any problem. Students are fully supported and advised in academic and extra-curricular activities by the faculty members of the department.

Standard 4.1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.

The course is offered regularly as per schedule. The degree consists of eight semester's two terms per year. The department offers core courses in first six semesters of BS Program; while the courses of specialization are offered in the last two semesters. Minimum 05 students in a batch are required to offer the specialized course. This condition was related in just 3 years of the university. Maximum 40 students are taken in a class.

## Standard 4-2: Courses in the major areas of study must be structured to ensure effective interaction between student, faculty and teacher assistants.

Every course offered in the program carry assignments, class presentations and practical work. Students have close interaction with their teachers for the guidance related to prepare their assignments and presentations. Each instructor adopts his way to interact with his students either in the class or during the office hours. However no proper procedure is adopted for student teacher interaction. Improvement needs in this area to fulfill the requirements.

Standard 4-3 Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and careers choices.

An orientation class is conducted in the start of every semester. In the orientation class, concerned faculty members provide a document containing program mission, objectives, outcomes, curriculum design \& organization, assessment-methodology and attendance criteria.

Similarly, the contents of the document having program mission, objectives, outcomes are available to all students of the concerned course in shape of module description. The same document is also shared with the concerned Chairman/ HoD, Office of the QEC and Director Academics. Professional counseling is usually carried out by Student Career Counseling Committee constituted for the purpose. The students can also consult with the chairman of the department or with the office of the registrar. A faculty member is assigned responsibility to discuss and coordinate with students in taking the right decision about their career.


The execution of the major functions, such as student admission and registration, faculty recruitment, teaching, and graduation are documented and conducted in a well-organized manner. These processes are controlled, periodically reviewed and evaluated continuously.

Standard 5-1: The process by which students are admitted to the Program must be based on
quantitative and qualitative criteria and clearly documented. The process must be periodically
evaluated to ensure that it is meeting its objectives.
The admission criterion is set by the university and it is revised periodically. However, the admission of the students is the responsibility of the Director Academics office and the department is not directly involved in this process. The admission office gives admissions according to the criteria set by the university.

## Admission Procedure:

- The admission notice for BS (Hons) Program (4 years) is advertised in the national and local newspapers soon after the result declaration of FA/F.Sc of all Boards of Intermediate \& Secondary Education of Khyber Pukhtunkhwa. All the eligible candidates fulfilling the requirement can apply for the courses offered by the university.
- The prospective applicants are asked to submit their admission forms, complete in all respects, within the prescribed period of time.
- After a thorough scrutiny and sorting, the names of eligible candidates are notified.
- A candidate may apply for three disciplines/subjects on a single form, but he/she must prioritize his/her options in the admission form.
- Once submitted, no changes/modifications are acceptable in the admission form.
- A candidate gets to lose his/her right for admission, if he/she provides false information in the admission form. Moreover, if the documents attached were found fake they would be considered guilty of gross misconduct and such act shall be highly condemned.
- The applicant having $3^{\text {rd }}$ division or having obtained marks less than $45 \%$ are not eligible to apply.


## Criteria for Admission:

Students with F.Sc pre-engineering/F.Sc pre-medical or Equivalent with at least $45 \%$ marks are eligible to apply. The selected candidates for admission must present their original documents before the committee on the announced date.

## Documents to be submitted with admission form:

The following documents must be submitted with the completed application form:

1. Three recent color passport size photographs, duly attested
2. Attested photocopies of Detailed Marks Certificates (DMCs)
3. Attested photocopies of provisional /original certificates
4. Attested photocopy of character certificate
5. Attested photocopy of CNIC of the Applicant/Father/Guardian
6. Migration certificate, either board to university or university to university (admitted candidates only)
7. Original undertaking on judicial stamp paper of RS. 20/- each, duly attested by political agent/DCO/ First class magistrate as PS specimen provided in the prospectus (admitted candidates only)
8. Candidates applying against the reserved seats of disabled or Afghan students must also attach the relevant documents of eligibility with the form
Distribution of seats in each department is given as under:
Open merit 26

## Reserved Seats:

Female 2
Afghan 01
Disabled/Handicapped 01
Total: 30

## Displaying of merit lists:

After the closing date of admission forms submission, the provisional merit lists are prepared on the basis of the following points:

- Percentage of marks obtained in FA/FSc
- In case of a tie in any merit position, SSC marks percentage is considered. In case of further tie, the age of the applicants is the determining criteria and the older candidate is to get preference.
- Separate merit list are prepared for the reserved seats of female, Afghan students and disabled following the above criteria.
- All the merit lists for admission are displayed on the main notice board of the university campus and on the university website http://www.sbbu.edu.pk


## Interview of specified seats:

- Interview for the specified seats of Afghan students and disabled are held on the dates specified by the office of the Director Academics.
- All the applicants will ensure their presence and signature in the attendance sheet on the day of test/interview, even if they are on waiting list.
- The university fee is to be deposited in HBL Sheringal Branch, adjacent to university campus. After depositing the prescribed fee, the applicant must bring the original bank receipt to the account section of the university.
- In case a student wants to shift from one discipline to another within a certain time period, the fee and other charges shall be adjusted accordingly.
- Any reserved seat remaining unfilled, at the prescribed time, shall be filled through open merit.


## Standard 5-2: The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented.

Each department shall send details of the admitted students to the controller of examinations on the prescribed proforma for registration within one month of the finalization of $1^{\text {st }}$ term/part- $1 /$ previous admissions. The office of the controller of examinations shall maintain record of all the registered students in manner which shall contain the Name, Father's Name, Date of Birth, Permanent address, CNIC No. of the candidate, DMC of SSC and intermediate Examination, details of any other examination and result of every University Examination.

## Academic Progress of Students:

In semester system, monitoring of student progress is evaluated by tests, surprise quizzes, assignments, class presentation, projects and final exam at the end of the semester.

## Internal Evaluation:

| Attendance + Class participation | $=5 \%$ |
| :--- | :--- |
| Class Presentation | $=10 \%$ |
| Home Assignment | $=10 \%$ |
| Test and Quizzes | $=10 \%$ |
| Mid Term | $=25 \%$ |
| Final Term | $=40 \%$ |

In addition to the above criteria, the experts of the subject can add any addition modes of evaluation as required by the nature of the subject. Similarly, if required, a teacher can have 3 to 5 tests and $1-3 \mathrm{Mid}$ Term tests.

Standard 5-3: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation

Recruitment of the faculty members is done on open merit by inviting the applications through newspapers. Written screening test is conducted for short listing. The candidates are required to appear before the selection board for interview. The names of selected candidates are recommended to syndicate for approval. After the approval, the registrar issues the offer letters for the appointment. Faculty members are made in accordance to the policy approved by HEC.

Faculty's Recruitment, Training, and Evaluation

| Faculty | Policy | process |
| :---: | :--- | :--- |
| Recruitment | As per HEC guidelines | Through selection board (for permanent seats) and <br> approval by the University Syndicate. Through HOD <br> \& VC (on contract basis) |
| Evaluation | As per HEC guidelines <br> (Periodically) | Evaluation by students through Quality <br> Enhancement Cell (QEC) and Self-assessment by <br> the faculty. (At the end of each semester) |
| Promotion | As HEC criteria for faculty promotion <br> and service statute of SBB University. | Through selection board and approval by the <br> University Syndicate |

The performance of the faculty members is monitored regularly and continuously by the Chairman/HoD of the department, and it is evaluated annually through ACRs. (Annual Confidential Report) There was no systematic process before to evaluate the faculty members, now after establishment of QEC each faculty member is evaluated by the students via "Teacher Evaluation Questionnaire". at the end of each semester.

Standard 5-4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasize active learning and that course learning outcome is met. The process must be periodically evaluated to ensure that it is meeting the objectives.
Process to ensure teaching and delivery of course material:

- Time table is strictly followed by all faculty members. The Chairperson of the department frequently gets feedback from the students during the semester.
- Students are show their test and papers in the show off session after every test and quiz, this process in made sure by the HoDs. Students can see their papers marked by the teacher and view it.
- All the relevant materials (Tests, Assignments and Quizzes) of evaluation are submitted to the office of the HoD. It purpose to ensure that the grading is transparent
- Award list of all sessional and final term papers is submitted to the controller of examination and copies are left in the department.

In order to ensure that the teaching is effective a quarterly survey is conducted by the university QEC and the findings are communicated to the concerned faculty members. After completion of Survey Assessment Team meeting is called to assess the process and make implementation plan for the said department.

Standard 5-5: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.

Currently there is no proper procedure to assure that whether the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Plan required for this area. As no graduates are yet produced. So no proper procedures to assure that the graduates meet the program requirements or not. This area needs concentration to develop this procedure. Further planning is required for this area.


Faculty members of the SBB University are active in teaching and research activities and have the necessary technical depth to support the program. Teachers attempt to cover the curriculum adequately and in case of need hold extra classes.

> Standard 6-1: There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas / courses with continuity and stability. The interest of all faculty members must be sufficient to teach all courses, plan, modify and update courses. The majority must hold a PhD degree in the discipline

The interest and qualifications of faculty members are sufficient to plan, teach, modify, and update all offered courses and curriculum. Following are the brief details of the departments' faculty members.

## Pen Picture of Faculty Members:

Name: $\quad$ Dr. Abdul Khaliq Jan
Designation: Assistant Professor (Chairman)
Address:
Qualification:
Department of Chemistry, SBB University
Ph.D

Name: Dr. Farman
Designation:
Address:
Qualification:
Name:
Designation:
Address:
Qualification:
Assistant Professor
Department of Chemistry, SBB University Ph.D

Mr. Nasir Ud Din
Lecturer
Department of Chemistry, SBB University
M.Phil in Progress

Name:
Designation:
Address:
Qualification:
Mr. Kashif Raza
Lecturer
Department of Chemistry, SBB University
M.Phil in Progress

## Standard 6-2: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

Faculty members of SBB University are considered updated in the discipline based on the following criteria:

- All teachers meet the HEC criteria for appointment in their respective cadre.
- Teachers generally participate in seminars, conferences at National /International levels.
- Teachers take interest in teaching and involve themselves in research activities
- A number of teacher training and refresher courses are conducted by QEC, and other academic departments in the university.


## Faculty development

| Standards | Y/N |
| :--- | :---: |
| Faculty resume has been prepared in line with HEC | Yes |
| Full time faculty have sufficient time for scholarly activities and professional development | Yes |
| Any faculty development program is conducted | Yes |
| Faculty programs are evaluated | Yes |
| Evaluation results of faculty are used for improvements | Yes |

## Standard 6-3: All faculty members should be motivated and have job satisfaction to excel in their profession

Every year university awards Best University Teacher Award to faculty members for their outstanding performances. Outstanding Teachers are selected based on Students Teacher Evaluation Questioner, Peer Evaluation and HoD Evaluation. For job satisfaction the university ensures fair, timely selection, appointment/promotion as per HEC criteria. Good working environment exists for research on commercial issues.


Institutional facilities, including library, class rooms and offices need improvement to support the objectives of the overall programs of the University. Class rooms and offices must be adequate to enable faculty to carry out their responsibilities.

## Standard 7.1: The institution must have the infrastructure to support new trends such as e-learning.

Electronic library books and journals are not available for learning purpose.

- Insufficient facilities regarding the infrastructure to support new trends in learning.
- Insufficient library's technical collection of books.
- Recommended books, relevant journals of the programs are not available to the students.
- However, this aspect needs to be strengthened for overall university departments.


## Following facilities are available at the department at the University Campus:

## Internet Facility

Limited internet facility is available for students.
Hostel Facility
Limited hostel facilities for boys are available.
Canteen
Separate girl's canteen is present for girl students within the campus.
Medical Facility
University is Basic Health Unit (BHU) for the facilitation of students, faculty and staff; currently there is one medical practitioner in the BHU. The appointment of female doctor is in process.
Faculty Offices
Offices with in adequate facilities are available for the faculty.
Standard 7.2: The library must possess an up-to-date technical collection relevant to the Program and must be adequately staffed with professional personnel.

The library space and books are not sufficient for university and is also not updated regularly according to the academic and research needs of the university staff. The university Central Library has very limited number of books and journals. It does not meet the standards of a university library. Departments itself does not have any library. The Library is not registered to any on-line journal or database cataloging and abstracting engines.

## Standard 7.3: Class room must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.

Majority of the class rooms are available without multimedia. Common rooms (Neither for male nor for female students) are also missing. The department lacks individual faculties offices mostly shared offices are available and class room facilities are also not sufficient.

The university administration is trying to provide all the possible facilities to the departments and has been struggling hard for the up gradation of departments and establishing new faculties and institutes.

## Standard 8.1: There must be sufficient support and financial resources to attract and retain high

 quality faculty and provide the means for them to maintain competence as teachers and scholars.In order to groom the faculty, university usually offers various trainings, workshops and seminars for faculty. The University is also trying to attract highly qualified faculty. All the financial matters of the overall department are managed by University finance Directorate and Registrar office with no involvement of the department. Last year, the university arranged 10 trainings for in service teachers both in main and sub campus at Chitral. These training were of various length duration ranging from 3 days to one month period.

Faculty Pay is as per the institution \& universities in the public sectors.

## Standard 8.2: There must be an adequate number of high quality graduate students, research

 assistants and Ph.D. students.The university is newly established so there is no research assistant. However Phil students are perusing different research projects in the university, under the supervision of their teacher. There are currently only five PhDs in the university. Moreover they have no research allowance and get only $5000 /-\mathrm{PhD}$ allowance which is not equal to other universities. This area highly needs the concentration or focus of the authority.

Standard 8.3: Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.

All the financial matters of the overall department are managed by the university Finance Directorate and Registrar office with no involvement of the department.

