



**UNIVERSITY OF BALOCHISTAN
QUETTA**

**SELF ASSESSMENT PROCEDURE
DEPARTMENT OF CHEMISTRY**

BY

THE QUALITY ENHANCEMENT CELL

PREFACE

Assessment is a systematic process of gathering, reviewing and using important quantitative and qualitative data and information from diverse sources to gauge the status of an activity. Self Assessment of a Department pertains to educational program, for the purpose of improving teaching and learning, process to evaluate whether academic and learning standards are being met. Standards are minimum academic requirement to be met by the Department, given by the Higher Education Commission.

Self assessment (SA) is an assessment conducted by a department itself to assess whether programs meet their educational objectives and outcomes. It is aimed at improving program quality and enhancing students learning.

The University of Balochistan requires that every department must conduct SA for its academic programs in order to improve them and ensure high academic standards. Self Assessment is an important tool for ensuring academic quality and it provides feedback for the faculty as well as the administration to initiate corrective actions for improvement.

This document presents the process of conducting SA of the Department of Chemistry. All other departments would follow its assessment in a similar fashion. In this document, eight criteria for SA and standards for each criterion are defined with examples. Proforma for surveys of Alumni, Employers, feedback on teaching, faculty, course work and on program completion are available on website of the University of Balochistan on QEC link.

Vice Chancellor

Quetta
Dated: 08th February, 2008

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UNIVERSITY OF BALOCHISTAN, QUETTA

SELF-ASSESSMENT PROCEDURE

Following is the procedure for Self Assessment (SA) and Internal Review adopted by the University of Balochistan, Quetta.

1. The QEC initiates the SA through the Vice-Chancellor Office to Deans and then to Chairman / Chairperson one semester / year earlier. If the program is undergoing for the first time, the department will be given one academic year for preparation.
2. Upon receiving the letter, the department shall form a **Program Team** (PT). The PT will be responsible for preparing **Self-Assessment Report** (SAR) about program over a period of one semester or one year. The PT will be the contact group during assessment period.
3. The department shall submit the SAR to the QEC through the concerned Dean. The QEC reviews the SAR within one month to ensure that it is prepared according to the required format.
4. The Vice-Chancellor forms a **Program Assessment Team** (PAT) in consultation with the QEC recommendation. The PAT comprises of 2-3 faculty members.
5. The QEC plans and schedules the PAT visits with the department that is offering the program.
6. The PAT conducts the assessment; submit a report and presents its findings in an exit meeting that shall be attended by the QEC, Dean and PT.
7. The QEC shall submit an executive summary on the PAT findings to the Vice-Chancellor.
8. The departments shall prepare and submit an implementation plan to QEC based on the PAT findings. The plan must include PAT findings and

corrective actions to be taken, assignment of responsibility and a time frame for such actions.

9. The QEC shall follow up on the implementation plan to ensure that departments are adhering to the implementation plan. The department shall inform the QEC each time a corrective action being implemented. The QEC shall review the implementation plan once a semester or year to assess progress of implementation.

Assessment Results Implementation Plan Summary

S.No	PAT Finding	Corrective Action	Implementation Action	Responsible Body	Resources Needed
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

Chairman's Comments

Name and Signature _____

Dean's Comments

Name and Signature _____

QEC Comments

Name and Signature _____

Proposed Role and Responsibilities of various parties in SA

1. Head of the Department

He / She should be the quality officer of departmental PT and responsible to QEC via Dean of Faculty. The Chairman may nominate the officer on his / her place if appropriate.

- a) For planning departments modules (courses) and programs of study.
- b) For the establishment and maintenance of academic standards in teaching, research and supervision

2. Program Team (PT)

All departments are required to have a PT that comprises of Chairman (Officer of PT) and three other faculty members.

Role of PT

The PT should have a fundamental role in quality assurance and academic standards e.g.,

1. To regulate the teaching and curricula of the subject.
2. To make recommendation for the examiners.
3. To propose new modules for the program.
4. To conduct annual program monitoring / Self-Assessment.
5. To consider feedback from external examiner, students and collect data on student achievements and qualification awarded.

3. Program Assessment Team (PAT)

The PAT comprises of Deans of the Faculty.

Role and Responsibilities of PAT

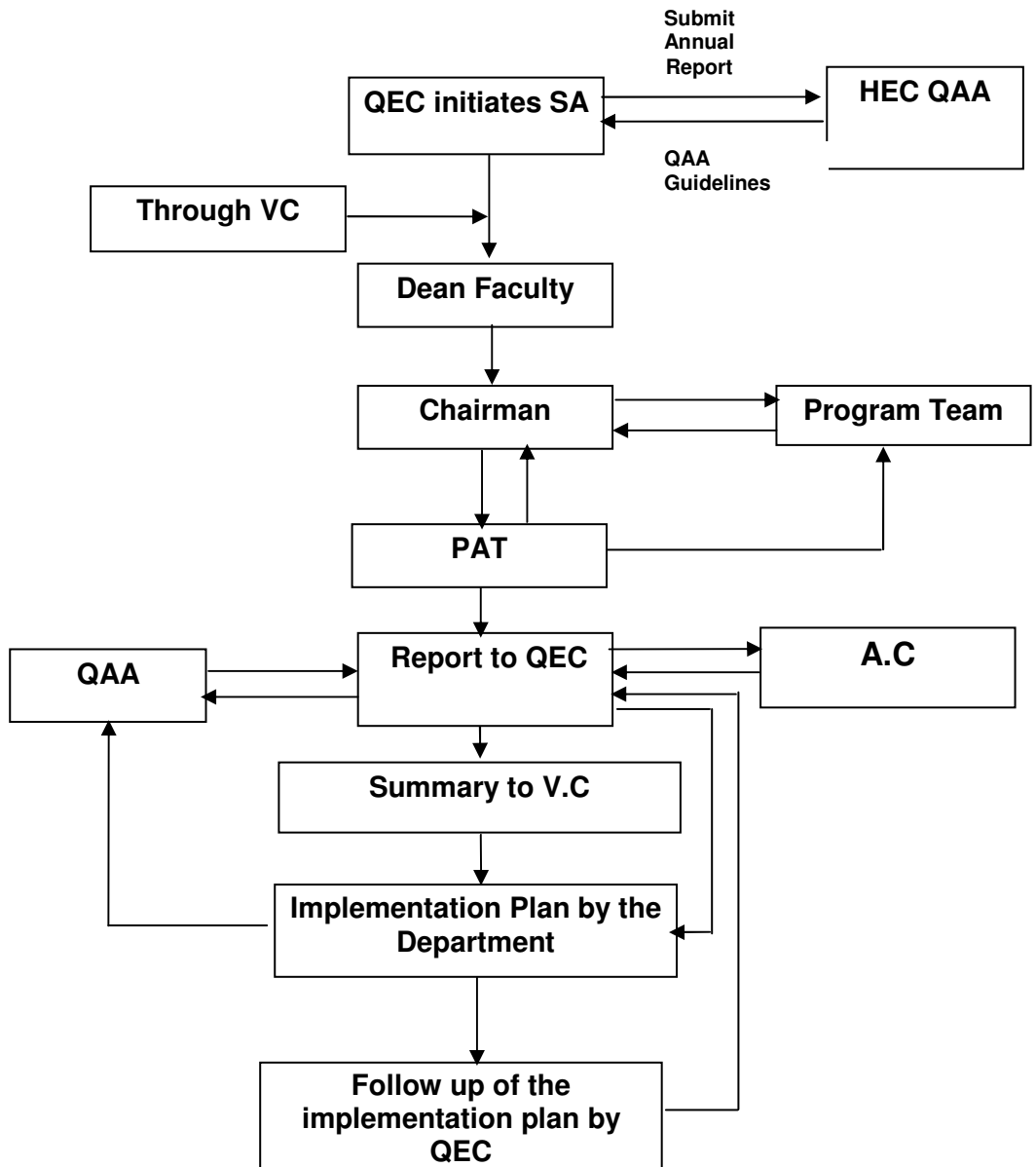
- a. The QEC will plan PAT visits to departments that offer program.
- b. The PAT conducts the assessment in consultation with departmental program team and submits its findings to QEC.
- c. The PAT will be responsible for the development of academic policy in support of learning and teaching, which includes both the mechanism for quality assurance as well as consideration of generic issues

identified through QA process. The PAT should develop, monitor and annually update the teaching learning quality enhancement strategy.

- d. The PAT will also have the responsibility to review internal departmental assessment and monitor implementation of their recommendations.

SELF ASSESSMENT PROCEDURE

ORGANOGRAM



Key Words:

- QAA:** Quality Assurance Agency
- PAT:** Program Assessment Team
- AC:** Academic Council
- PT:** Program Team

CRITERION-1

Program Mission, Objectives and Outcomes

Criterion-1**Program Mission, Objectives and Outcomes****Institutional Vision**

To be a model public University providing affordable, quality, higher education opportunities to develop the potentially rich human resource in Balochistan through knowledge-centered teaching and research while maintaining and fostering a high levels of ethical and professional standards and promoting national identity.

Institutional Mission

- Functioning as a student-centric institution dedicated to academic excellence, tolerance and fairness.
- Maintaining and fostering highest ethical and professional values while teaching students to seek knowledge analytically, be creative, communicate effectively and become technologically literate to meet the emerging needs of our society within the global village.
- Ensuring and supporting faculty and staff to continue their professional and intellectual development.

Institutional Core Values**Integrity:**

- Integrity implies honest, upright decision making, and taking actions which are not biased in favor of one individual or group of individuals.
- It implies that the decisions made are not influenced by subjective reasons, personal interests / gain, fear, unlawful pressures, favor and hidden considerations.
- It applies to both official as well as personal behaviors as it directly effect the group, community, society and institution where we live, work and function.

Creativity:

- It implies exercising imagination and constantly seeking out originality. It comes from developing a sense of curiosity and courage to questions the status-quo.
- It aims at exploring and following methods of doing things is a different way for betterment and improvement in solutions to problems. It involves questioning pre-conceived ideas, discovering and / or making something not already there.
- Indeed, it is a divine attribute; but human beings are also gifted to be creative.

Team Work:

- Corporative effort is always more productive than an individual's effort. Learning, teaching, research, and application of knowledge are all best done through a team work.
- Team work generates synergy and can achieve more than the sum total if individual's efforts in any field of endeavor.
- It demands acceptance of other's complete, need for mutual support, tolerance of each other, fostering interpersonal relation, willingness to listen to each other and accepting / accommodating the ideas of others.

Excellence:

- It implies surprising others in good quality of any work and striving for great merit. All human endeavor can be placed on a continuum of two extremes; of extremely-poor-show to excellence.
- Striving for excellence implies fostering a mental attitude of not accepting anything less than the best from one self: in terms of hard work, enquiry, and acquiring knowledge, willingness to learn new things and be a team member.

- Pursuit of excellence demands, integrity, creativity, team work, dedication, pride and confidence in one's abilities and destiny.

Responsibility (to Stakeholders):

- Students are the future of Pakistan. The teachers by virtue of their appointments have a sacred trust of grooming the students to a level of excellence that the future of Pakistan can safely be entrusted to them.
- Administration exists to facilitate the Learning, Teaching and Research; it is responsible to facilitate these functions by providing resource-support.
- All three pillars of the University therefore, are responsible to each other for their respective duties.
- Students, teachers and administration, all are responsible to each other, to the parents of students, to the community, the province and the country itself.
- These are the stakeholders to whom we all are responsible and morally accountable. Through our needs, behavior and attitude we must appear at all times to be cognizant of this value.

Department of Chemistry

The Department of Chemistry shall have its own Mission inline with the University of Balochistan's Vision and Mission Statements, standards and measurable objectives and expected outcomes for graduates. A strategic plan shall be in place to achieve the program objectives. The extent to which these objectives are achieved through continuous assessment and improvements must be demonstrated.

Program Vision

To be a model department focused on building and fostering academic environment conducive to teaching and research of chemistry at University level.

Program Mission

- To built concepts of chemistry through high quality teaching, practicals (laboratory work) and research awareness.
- To prepare chemists who are competent on global scale and will be efficient leaders in industry, academia and government.
- To conduct innovative basic and applied research that advances the frontiers of knowledge and especially addresses local and National problems.

Standard 1-1: The Program must have documented measurable objectives that support college and Institution mission statements

Program Objectives

1. Foundation:

"To provide students with solid foundation in chemistry based on its principles".

To achieve this objective a number of goals and elements were established.

Goal-1: To provide the best possible quality education, basic and applied research.

Elements of Goal -1:

- a) Comprehensive Chemistry curriculum for Graduate Program comparable with national standards
- b) Seek partnership in Chemistry research and education with chemical industry.
- c) Conducive environment for developing technical, ethical and leadership skills.
- d) Strong hands-on-experience through lab, experiments and projects.

Strategy:

Critically review graduate program admission requirement, introduce new strategic area in chemistry, attract graduate for substantial research outcomes, expand research infrastructure in order to enhance research work and support conferences attended both by faculty and students.

Goal -2: Achieve world-class level for education and research.

Elements:

- a) National / International standards recognized research by faculty.
- b) Collaborative interdisciplinary research.

Goal-3: Industrial Partnership

Be a leading Institution for supporting the technological advancement and economic growth of local and National chemical industry.

Elements:

- a) Enhance relationship with industry with regard to training and projects.
- b) Sponsor experience exchange programs with industry.

Strategy:

Develop effective mechanism for faculty / industry personnel exchange, conduct industrial / Government consultation services.

Benchmarks:

- Two publications per faculty member per year.
- Submission of at least one research proposal per faculty member per year.

2. Skills and Tools:

To provide students with the skills in Chemistry whereby they should be able to;

- a. Utilize and develop skills pertinent to identifications and analysis of chemical compounds, solution of problems through appropriate analytical and experimental tools.
- b. Formulate solutions to meet societal needs using chemistry concepts, tools and practices.
- c. Design, operate, maintain and upgrade techniques / methodologies and understand their impact on the society.
- d. Link theory with practice and demonstrate proper decisions making abilities while developing solutions.
- e. Demonstrate proper ability in the discipline to synthesize and identify chemical compounds.
- f. Demonstrate recognizable quality in critical and independent thinking skills.
- g. Engage in life long learning and demonstrate leadership in their chosen field of work.
- h. Demonstrate good communication skills with fluency in English both in report writing and in technical presentation. (oral, written and multimedia communication skills)

3. Professional Practices & Ethics:

To provide students with the knowledge of proper ethical and professional practices relevant to chemistry as well as the societal impact of the chemistry.

The 1st objective is aligned with department's mission by providing the best quality education in chemistry. The 2nd objective focuses on the skills and opportunities provided to chemistry in terms of core and optional courses. The 3rd objective is aligned with the department's mission of addressing the needs of the society through ethical and professional capabilities.

The following table-1 provides information how the department should measure its objectives, when it is assessed, improvements identified and made.

Table-1: Program Objectives Assessment:

S.No	Objectives	How measured	When measured	Improvement identified	Improvement made
a	b	c	d	e	f
1	To provide students with solid foundation in chemistry based on its principles	<p>Surveys</p> <p>a) Course Evaluation Questioner</p> <p>b) Annual Program Monitoring Report</p>	<p>24-04-2006</p> <p>24-04-2006</p>	<p>The Department needs to improve on; Providing relevant books, multimedia and overhead in class rooms, update curriculum and faculty and poor concepts and ideas presented.</p> <p>Disaffection with library and IT facilities, availability of books and journals, student advisory and information services, teaching rooms and catering services.</p>	<p>Multimedia for class rooms, relevant books are provided to chemistry department. Curriculum updated as per HEC criteria.</p> <p>University established career counseling cell, faculty of student affairs, computing facilities, support facilities and internship for students with employers and industry.</p>

a	b	c	d	e	f
2.	Skills and Tools in chemistry	a) Employer Survey	08-08-2007	a. Communication Skills b. Interpersonal Skills	a. Courses organized on Computer Training and establishment of training center. b. Introduction of Research Paper
3.	Professional Practice & Ethics	a) Alumni Survey b) Employer Survey	08-08-2007 08-08-2007	a. IT knowledge b. Report Writing c. Independent thinking d. Ethical Values	a. Establishment of Computer Lab. b. Introduction of Research Paper c. Formulation of Code of Conduct

Standard 1-2: The program must have documental outcomes for graduating students. It must be demonstrated that outcomes support the program objectives and that graduating students are capable of performing these outcomes

Program outcomes must demonstrate that chemistry graduates and post graduates have the ability: -

1. To apply knowledge of chemistry into practice (problem solving techniques).
2. To design and conduct experiments
3. To utilize up-to-date technique for analysis.
4. Having the ability to work in teams including multidisciplinary teams to solve the chemistry problems.
5. To understand the professional and ethical responsibility of chemists.
6. To understand the impact of chemistry on society and environment.
7. To understand the need and an ability to engage in life long learning of chemistry.

The program outcomes are the byproduct of the program objectives and are interrelated as given in the following table.

Table-2 Relationship between program objectives and program outcomes

Program objectives	Program Outcomes						
	1	2	3	4	5	6	
1	●	●	○	●	○	○	○
2a	○	●	●	●	○	●	●
2b	○	●	●	○	○	○	○
2c	○	●	●	○	○	○	○
2d	○	●	○	●	●	○	○
2e	●	○	●	○	○	○	○
2f	○	○	○	●	○	○	○
2g	○	○	○	○	●	●	○
3	○	○	○	○	●	○	●

- The specific objective meets the required outcomes
- The specific objective does not meet the required outcomes.

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

a) Actions Taken:

- i) Curriculum Updated
- ii) Relevant Books and Multimedia provided
- iii) Peer Review

b) Strengths and weaknesses of the program:

i) Strengths

- Qualified Faculty
- Laboratory Facilities
- Research Facilities
- Quality teaching

ii) Weaknesses

- IT training
- Optional Courses
- Assessment tests / Assignments
- Further improvement on teaching methodology
- Shortage of Class Rooms

c) Future development plans:

- i) Introduction of 4 years BS program
- ii) Designing of M.Phil / Ph.D. course work and its approval from the Departmental Board of Studies
- iii) Research collaboration with National and International Organizations
- iv) Introduction of Semester System
- v) Internship for students with employers and industry

Standard 1- 4: The department must assess its overall performance periodically using quantifiable measures

a) Student Enrolment:

S.No	Year	Degree		
		M.Sc	M.Phil	Ph.D.
a	b	c	d	e
1	2005	110	4	2
2	2006	115	5	3
3	2007	125	7	5

b) Student / Faculty ratio: 1:9

c) Time for M.Sc degree: 2 years

d) The average student grade point or division: 50-59 percent

e) Employer Satisfaction:

Employer's survey, as shown that they are satisfied with the overall performance of chemistry graduates in terms of courses. However, they have shown dissatisfaction on the communication skills, IT skills, report writing and interpersonal skills of graduates.

f) Publications: The faculty of chemistry in average produces 8-10 research articles per year.

g) Project: Research projects are funded by Pakistan Science Foundation, HEC and other National and International organizations.

h) Workshops / Seminars

2005 Two Seminars and one Workshop

2006 Two Seminars and two Workshops

2007

International Conference on Chemistry in
collaboration with institute of Bio-chemistry.

i) Student / Faculty Satisfaction:

Students are dissatisfied with IT training, student advisory services, teaching rooms, availability of books and library. Faculty were dissatisfied with the non-availability of glass blowing section, and technicians for operating / maintaining laboratory equipment.

CRITERION - 2

Curriculum Design and Organization

Criterion-2 Curriculum Design and Organization

The department of chemistry is running its academic program through annual system of examination. However, semester system is going to be introduced in 2009. The department offers M.Sc in two years degree program. It also offers M.Phil / Ph.D. degree program with HEC minimum admission criteria and course work of 32 and 18 credit hours respectively. The Ph.D. thesis is evaluated by the external referee from technologically advanced countries.

- a) Title of Degree Program: Master in Chemistry
- b) Description of Course Work for M.Sc in chemistry

Program of Studies offered

The M.Sc. course is a two years degree program based on taught courses and laboratory work. A student opting for M.Phil./ Ph.D. degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the said degrees. A thesis based on original research work will have to be submitted and defended as per procedure of HEC. The duration of these degrees depends on the performance of the student and on the nature of research problem. The minimum time limit for M.Phil and Ph.D is two years and three years respectively.

Description of courses for M.Sc.

There are five disciplines in chemistry.

Students of M.Sc. (Previous) will have to study all the compulsory courses and also have to opt one of the optional course

Compulsory courses

- a) Inorganic Chemistry,
- b) Organic Chemistry
- c) Physical Chemistry

Optional Courses

- d) Analytical Chemistry
- e) Bio-Chemistry

	Theory Paper 3 Practical 1 Thesis		100 100
4	Analytical Chemistry Theory Paper 1 Theory Paper 2 Theory Paper 3 Practical 1 Thesis	Optional	100 100 100 100 100
5	Bio-Chemistry Theory Paper 1 Theory Paper 2 Theory Paper 3 Practical 1 Thesis	Optional	100 100 100 100 100
6	Environmental Chemistry Additional	Compulsory	100

M.Phil / Ph.D. courses:

The department of chemistry has designed M.Phil / Ph.D. courses as per HEC criteria which will be placed before the Academic Council for approval.

Strength:

The core and optional courses and practical provide solid foundation and skills in chemistry.

Weaknesses:

Its lacks minor courses to be offered such as computer, IT training, basic math and statistics to deal more efficiently with practical aspects of program using chemistry concepts and linked with practice. A short course on laboratory training, professional ethics and societal impact of the chemistry need to be introduced.

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

The following table shown how the program content (courses) meet the program objectives:

Courses	Program Objectives									
	1	2a	2b	2c	2d	2e	2f	2g	2h	3
Core Courses	√	√	√	√			√			
Thesis	√	√	√		√	√	√	√		
Practicals		√	√	√	√	√	√	√	√	√

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

The following table indicates the elements covered in core courses

Elements	Courses
1) theoretical background	All compulsory courses
2) Problem analysis	Compulsory as well as optional and additional courses
3. Solution design	Practicals

Standard 2- 3: The curriculum must satisfy the core requirements for the program, as specified by the respective accreditation body

The department follow HEC minimum requirement for master program in chemistry as per decision of the National Curriculum Revision Committee and approved by the competent authority and statutory body.

Standard 2- 4: The curriculum must satisfy general education, arts and professional and other discipline requirements for the program as specified by the accreditation body

Program	Math and Basic Science	Engineering Topics	General Education	Others
Chemistry	Nil	Nil	Nil	Nil

The department of chemistry doesn't have minor subjects such as math, statistics and general education. The introduction of BS 4 year program in chemistry may help to provide to cover these subjects. The HEC needs to

introduce minor subjects for chemistry program through National Curriculum Revision Committee.

Standard 2- 5 Information technology component of the curriculum must be integrated throughout the program

Computer programs like MS Office, Coral Draw for graphical / Statistical interpretation need to be applied for practical solutions. It does not exist in the curriculum in order to satisfy this standard

Standard 2-6: Oral and written communication skills of the student must be developed and applied in the program

Research paper introduced can help to provide oral and written communication skills to the student of chemistry department.

CRITERION -3

Laboratory and Computing Facilities

Criterion - 3 Laboratory and Computing Facilities

Laboratory Facilities:

Five Specializations are offered by the Department of Chemistry and there are five teaching and five research Laboratories. In addition to this the department has a central research laboratory equipped by the help of HEC. All the laboratories are adequately equipped. The list of some of the equipment / instruments is provided below;

1	I.R Spectrophotometer (Pye Unicam SP 1000)
2	Biolumat (Berthold EG &G) (TWAS)
3	Deionizer (Elgastat B114)
4	Electrophoresis unit (Bio Rad) (TWAS)
5	Flame Photometer (Corning 400)
6	Peristaltic Pump (Autoclude) VL (UGC)
7	Peristaltic Pump (Reglo) (UGC)
8	PMT (Thorn EMI) (NSRDB)
10	Spectrophotometer (Hitachi U-1100) (NRSDB)
12	Spectrophotometer (Shimadzu) UV-120-02
13	Ultra Centrifuge (IEC- B-20 A,DAMON)
14	Electrophoresis unit (Desaga GMBH D6900)
15	Shaker (KL-2 Edmond Buhler)
16	Spectronic 21 (Jurgens)
17	Suction pump
18	Polarimeter (Griffen)
19	Refractometer (Hilger and Watts)
20	Spectronic (Hungry 2000)
21	Polarimeter (Erma)
22	Refractometer (Erma)
23	Rotary evaporator with thermostat (HEIDOLPH)
24	Spectromom (Hungry 2000)

25	Stabilizer (Rimco)
26	Vacuum pump (ME4R Membrane)
27	Electronic balance (Shimadzu BL Series)
28	Fraction collector (Pharmacia biotech, FRAC-100)
29	Rotary evaporator (BIBBY RE 200)
30	Shaker (Edmund Buhler, KL-2)

Computer Facilities:

There is a computer laboratory with 25 PCs and internet facility.

Internet Facility:

The internet facility is available in all laboratories, library and offices of teachers. A large number of international research journals are also available on Digital Library provided by Higher Education Commission and research article of interest can be down loaded.

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

All students and faculty members have adequate access to manuals / documentation.

Short Comings:

- a) Fuming cupboard needs repair
- b) All labs need fire extinguisher apparatus in case of emergency
- c) Fire-Alarm
- d) Glass-Blowing section

Standard 3-2: There must be adequate support personnel for instruction and maintaining the laboratories

Each laboratory has laboratory attendant and assistant for support to students and faculty. However, technicians may be required for long-term maintenance of equipments.

Standard 3-3: The University computing infrastructure and facilities must be adequate to support program's objectives

Computing Facilities:

- a) The University of Balochistan has adequate computer facilities / services and administrative staff to support its faculty, students and staff in their academic activities.
- b) All labs are maintained and managed by Directorate of Information Technology (DIT). Others than this there are more than 700 active users can excess LAN / WAN facility provided by DIT with 2GB bandwidth (full duplex) provided by PERN in collaboration with HEC. This is however very inadequate and we are trying to upgrade it to 8 GB.

i) Multimedia:

Each department has now been provided with 01 Multimedia and 01 overhead projector. The technical assistance of DIT is available for support.

ii) Website:

An informative and dynamic website is designed, hosted at our own registered domain URL address <http://www.uob.edu.pk>. All the information regarding new activities and examination results updated on daily basis. The link of Digital Library provided by HEC is also presented and updated by the DIT.

iii) Internet:

More than 750 active users access the LAN / WAN facility, provided by DIT, with 2 GB bandwidth (full duplex).

CRITERION - 4

Student Support and Advising

Criterion - 4 Student Support and Advising

Student of chemistry department must have adequate support to complete the program in a timely manner and must have ample opportunity to interact with their instructors and receive timely advice about program requirements and career alternatives.

Standard 4-1: Courses must have offered with sufficient frequency and number for students to complete the program in a timely manner

a) Departmental Strategy for Course Offering:

The department offers courses at Master, M.Phil and Ph.D. level following the line tables which includes number of classes, practicals tutorials and research guidance.

Program	Classes per week	Practicals per week	Tutorials / Research Guidance
M.Sc (Previous)	15	4	2
M.Sc (Final) (Five specialization)	15	2	2

The time table is followed throughout the academic year. The core courses, optional and additional courses offered can easily be completed under conducive environment. There is no provision of elective courses which need to be designed and offered. The department also offer English language course in the time table (3 classes / week) which are managed by the English Language Center.

Standard 4-2: Course in the major must be structured to ensure effective interaction between students, faculty and teaching assistants

Courses are assigned by the sectional heads of each specialization. The department head constitute a committee comprising

sectional heads for courses and practicals distribution among the faculty. There is no provision of teaching assistants in the department.

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 career choices

At department level, the Chairman nominates a senior faculty member as “Student Advisor” who is available to all students for course decision and career choices. The Chairman and Students Advisor works in collaboration with Institution’s Career Counseling Cell and Dean Faculty of Student Affairs. The objectives of the Career Counseling Cell and Faculty of Student Affairs are as follows

a. Career Counseling Cell

In an effort to remove the sense of deprivation among the educated youth of Balochistan, the Vice Chancellor University of Balochistan Brig (R) Agha Ahmad Gul has established a Career Counseling Cell in the University of Balochistan and has appointed Prof. Dr Izhar Hussain as Chairman of this centre. The major objectives of Career Counseling Cell are as follows:

- To provide up-to-date information to the students and recently passed out students about the career opportunities available for them.
- To provide personal guidance for on-campus recruiting.
- To approach departments, organizations and companies with the request to provide job opportunities to our students and passed outs.
- To provide facilities to the recruiting companies for on-campus recruiting.
- To provide, 1-on-1 counseling, and more to students on campus.

Recent Achievements

- Arranged the presentations given by the representatives of Sui Southern Gas Company Karachi to the students of University of Balochistan, about their Management Trainees Program.
- Arranged the on-campus interviews of students conducted by the representatives of Sui Northern Gas Company Karachi for recruiting Management Trainees for SSGC, for their 2 year Management Trainee Program.
- Provided the lists of top position holders in various Departments of Faculty of Social Sciences, to Pakistan Bait ul Mall for recruitment in their organization.
- Approaching different companies and departments to provide on-campus recruitment opportunities to our students and passed outs.

b. Faculty of Student Affairs

Terms of Reference

1. In keeping with Vision and Mission of the University, the students are our main concern. It is, therefore, essential that they are taken care of not only by departments and the faculties but also by a full time Dean. Accordingly, a Faculty of Students Affairs, which was existing in the establishment but had never been staffed, is hereby being revived, staffed and established in Arts Block of the campus.
2. Organizational Structure: Dean Faculty of Students Affairs will be appointed by the Chancellor on the recommendations of the Vice Chancellor, UoB. He will have a Director Students Affairs to assist him along with the necessary clerical staff.
3. Aim of Faculty of Students Affairs: The Dean will be the focal person for pursuing the Vision, Mission and Core Values of the UoB, so far as the students are concerned. He shall ensure this through effective and

timely management of all students' affairs which cannot be handled by the Departments / Faculty's Heads. He will be directly responsible to the Vice Chancellor and will handle all academic / non-academic affairs of the students of the University in close coordination with the chairpersons and Deans of departments / faculties and administration. He will also act as inter-faculty coordinator for students as and when needed.

4. Job Description:

a. The Dean

- (1) Dean Students Affairs position plays critical role as chief arbitrator in all matters concerning the students which fall outside the ambit of Departments & Faculties concerned.
- (2) He can deal with all matters pertaining to academic / non-academic matters of students of the University.
- (3) In dealing with Student Affairs, the Dean will ensure adherence to the University's Vision, Mission and Core Values.
- (4) He shall take initiatives for promotion of quality higher education and research under the umbrella of UoB.
- (5) He will ensure that conducive environment for imparting quality higher education to the students of University are maintained / fostered.
- (6) In addition to his teaching and research responsibilities, the Dean is responsible to perform the following duties also:-
 - (a) Acting as a team leader to guide and motivate his team to achieve organizational goals.
 - (b) Organizing seminars, conferences and workshops in the University for students.
 - (c) Nominating students for scholarships, fellowships, workshops and conferences, etc for the human resource development of the student's community.

- (d) Taking disciplinary actions and remedial measures to maintain discipline in the University.
- (e) Performing such other functions and duties as may be assigned by the Vice Chancellor.

(b) The Director

- (1) He will be under study to the Dean and will assist him in his duties.
- (2) In the absence of the Dean he shall automatically assume the responsibilities of the Dean.

5. Role and Duties of Faculty of Students Affairs. The Faculty of Students Affairs will perform duties pertaining to Academic, Financial, Extra Curricular and Miscellaneous matters in coordination with Registrar / Heads of Departments / Deans as follows:-

a. Academic

- (1) Admission of students under category B & C.
- (2) Selection of students for other universities of the country.
- (3) Migration from one department to other.
- (4) Re-admission of struck off cases.

b. Financial

- (1) Financial Assistance through Less Privileged Students Fund.
- (2) Financial Assistance through Students Welfare Fund.

(3) Procedure

Assistant Registrar, Students Affairs after thorough scrutiny will place the cases pertaining to the above mentioned academic and financial matters before the Students' Support Committee.

- (4) The Registrar's Office will notify the decision of the Committee after the approval (If required) of the competent authority.

(5) The routine cases will be dealt at Director / Dean Student
Affair's level.

c. Extra Curricular Activities:

Faculty of Student Affairs will play facilitation role on the
eve of the following events: -

- (1) Convocation.
- (2) Golden Week.
- (3) Sports Galla / Competitions.
- (4) Nomination of students for Debates, Conferences,
Workshops and Seminars.
- (5) Procedure for Nominations

For the nomination of students, Director Student Affairs
will invite applications from interested students through
Chairmen and Deans. Selection of student for
particular event will be made by a Committee headed
by the Director Students Affairs. The Dean Students
Affairs will constitute the Committee.

d. Miscellaneous

Day to day miscellaneous cases will be dealt at the level of
Director / Dean Student Affairs.

CRITERION - 5

Process Control

Criterion -5: Process Control

The processes by which major functions are delivered must be in place, controlled, periodically reviewed, evaluated and continuously improved. To meet this criteria a set of standards must be satisfied.

Standard 5-1: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives

The department of chemistry follows the policy of the University of Balochistan laid down in its prospectus for admission and periodic evaluation of students described below;

a. Program Admission Criteria:

- i. Passed B.Sc with chemistry
- ii. Written test and interview to be qualified with 45% marks

b. Number of Seats Available:

The total number of seats available in chemistry department including all categories of reserved seats are 35 (thirty five). Some of the Departments, where additional class rooms and teachers are available, two sections each comprising 35 students are also scheduled. The distribution of seats in chemistry department is as under:-

i. Local and Domicile of Balochistan – Category ‘A’ 30

Open merit: Balochistan	10%	03
Open merit Quetta District	15%	04
Open merit: District other than Quetta	75%	23

ii. Personnel Serving in Balochistan – Category “B”

(Non-Local & Non Domicile) Daughter/son/spouse 02

iii. University Employees/Nominees of AJK, Armed Forces/ Northern Areas/FATA and Federal School /Reserved Seats for Disabled – Category “C” Daughter/Son/Spouse	03
Total Seats	35

- iv. Category “C” applicants will submit their application forms to the Assistant Registrar (Students Affairs) by the due date attached with the required documents and an affidavit specimen of which is Annex ‘A’

c. Institutional Admission Criteria

- Admission in all subjects and classes shall be allowed only to applicants who belong to Balochistan. However, wards of servants of Federal Government or Autonomous Organizations, who have had their previous education in the Institution in Province of Balochistan, will be eligible for admission only on reserved seats decided by the University.
- Candidates who qualify, in the supplementary examination of that year shall not be allowed admission during that year.
- Due to limited seats/class rooms, admission to a second or subsequent graduate or Post Graduate degree course in the University is not allowed, except professional degrees, i.e. M.Ed., B.Ed., MBA (Executive), MCS (Self-Finance), Law, Library Information Science.
- No student shall at one time join or continue on the roll of two or more courses of study, leading to two or more degrees in the same or different faculties or institutions.
- Admission to BS four years course shall be allowed to candidates who have passed Intermediate Examination of that year.
- Admission will be allowed only to those applicants who have passed the qualifying examination at most two years prior to the year of admission. However in the subjects where the number of applicants is less than the

numbers of seats available in a department, relaxation can be considered.

d. Institutional Admission Procedures

1. The forms for admission will be available from the following:
 - Principals of all the Colleges in Balochistan.
 - Habib Bank Limited, University Branch, Quetta.
2. Offices of Teaching Departments shall remain open during office hours to receive admission forms.
3. Candidates seeking admission shall submit the admission form in duplicate.
4. Each applicant and his/her guardian or father shall have to sign a declaration that he/she shall abide by all the rules and regulations of the University and he/she shall devote his/her whole time to studies.
5. Three copies of recent passport size Photographs duly attested. Female applicants are not required to furnish Photographs.
6. Attested copy of character certificate from the Head of the Institution last attended. Candidates qualifying as private candidate shall produce character certificate from a Government Officer not below the rank of 17 grade.
7. Attested copy of Provisional certificate of the last qualifying examination.
8. Attested Detailed Marks Sheet of the last qualifying examination.
9. Attested copy of Local or Domicile Certificate of the Province of Balochistan.
10. Attested copies of all other educational certificates.
11. In service applicants are required to produce:
 - No Objection Certificate from the Employers and also
 - A Certificate that their hours of employment will not clash with the hours of study.

12. Original documents will be shown at the time of Interview and will be checked by the Chairman/Admission Committee of the concerned department.
13. Candidates having qualified from other Board or University shall have to submit in addition to the above, a migration certificate from the said Board or the University.
14. Applicants shall submit the admission forms complete in all respect to the concerned department by the last date fixed for the receipt of such application. Incomplete forms shall not be accepted on any account.
15. Applicants must collect an acknowledgment receipt, for each application, which must be produced at the time of Test/Interview. Processing of admission will be completed within prescribed schedule as announced.
16. The selected candidates will be required to complete the admission formalities up to the last date announced by the University.
17. If a candidate fails to make payment of admission dues up to the last date, so fixed, his/her seat will stand cancelled.
18. Any one who fails to join the department within fifteen days from his/her admission will forfeit his admission.
19. Students admitted to M.A./ M.Sc. courses may be allowed to change their subject/departments within two weeks of the start of teaching in the department. Such change will be allowed by the Dean on the recommendations of the Chairperson of concerned departments on payment of prescribed fee of Rs.500.00
20. List of selected candidates will be displayed only on the Notice Board of concerned Department/Institute/Center/College on the dates announced in the academic calendar. The candidates are, therefore, advised to see the Notice Board of the respective

Department/Institute/Center/College for information regarding any kind of information.

21. Candidates will not be informed individually about their provisional admission/withdrawal or cancellation of admission and the University, therefore, will not accept any responsibility in this regard.

e. Attendance Requirements

1. Attendance in Lectures, Practical, tutorials and field work, is compulsory for all students.
2. The name of a student, who absents himself/herself from classes without proper leave sanction, for a period of fifteen days, shall be struck off from the rolls on 16th day of such absence.
3. A student, whose name has been struck off the rolls, may be readmitted for valid reason within two weeks during the same academic year to the same class. This readmission will however be allowed by the respective Dean on the recommendation of the Chairman of the Department. Fee for readmission will be Rs.500. If a student fails to get readmission within the stipulated period he/she may be allowed readmission by the Academic Committed headed by the Pro Vice Chancellor within one month from the date, his/her name was struck off with a fee of Rs 1000. After one month, readmission is Not allowed.
4. Each student will be required to complete at least 75% of attendance in Lecturers and Practical for becoming eligible to appear in the examination that year.

f. Students Code of Conduct-Discipline

1. No Student shall:
 - Do, or propagate, anything repugnant to Islam within and outside the precincts of the University/College;
 - Say or do anything which might adversely affect the honor and prestige of Pakistan, the University teachers and his/her educational institution;

- Smoke in the classroom, laboratory, workshop, library, and examination hall;
 - Form, or associate with an organization/society/club or any other body promoting and/or inciting parochial/linguistic/regional feelings;
 - Organize, or hold any function in the University except in accordance with the prescribed rules/regulations;
 - Collect money or receive donations or pecuniary assistance for or on behalf of the University or any University Organization except with the written permission of the Vice Chancellor;
 - Stage, incite, or participate in a walkout, strike or any other form of agitation which might create or is likely to create law and order problem for the University and affect or is likely to affect its smooth functioning;
 - Indulge in immoral activities, use indecent language, wear immodest dress, make indecent remarks, jokes or gestures or behave in an improper manner;
 - Cause disturbance to others;
 - Disturb peace and tranquility of the Institution;
 - Keep or carry weapons, narcotics, immoral or subversive literature; and
 - Use in-salutary or abusive language or resort to violence against fellow student or employee of the University.
2. Violation of any of the above will be considered misconduct and liable to Disciplinary Action.
- a. Disciplinary action by the Principal of a Constituent /Affiliated College/Chairman of the University Teaching Department/ Director of an Institute/Center and the Discipline Committee against the student(s) may be taken in one or more of the following forms depending upon the severity of the offence:
- A student may be fined.
 - A student may be placed on probation for a fixed period. If during the period of probation he/she fails to improve his/her conduct, he/she may be rusticated or expelled.

- A student may be suspended from the rolls of a College / Institute / Center / Department for a period not exceeding two weeks at a time.
- b. A student may be rusticated/expelled or asked to withdraw from the College/Institute/ Center/ Department in the manner mentioned in the regulations relating to Rustication, Expulsion and Withdrawal.

g. Regulations Relating to Rustication, Expulsion and Withdrawal

- Rustication, whenever imposed on a student, shall always mean the loss of one academic year so far as his/her Examinations are concerned. The period of absence will, however, depend upon the time of the year when the penalty is imposed.
- The Vice Chancellor has the discretion to permit to rejoin the class in the same College/Department/Institute/Center at the beginning of the next academic year.
- A rusticated student once readmitted and again found creating disturbance/indiscipline, etc. will be expelled from the University.
- A student expelled from the University shall not be readmitted into the same University without the approval of the Syndicate. Readmission shall in no case be granted before the expiry of one academic year from the date of expulsion.

h. Code of Honor.

Being a student in the University is a matter of privilege, prestige and honor. All students are expected to conduct themselves with honor and dignity. The following Code of Honor enunciating the basic principles of conduct expected of a student should be propagated by the Principals of the Constituent Colleges and the Chairmen/Directors of the University Teaching Departments / Institute / Centers:-

1. All Students must have faith in and respect for the ideology of Pakistan.
2. All Students must in matters of religion respect the convictions of others.
3. Every student is expected to:-
 - Be Loyal to Pakistan;
 - Obey the Law of the land as well as the rules & regulations of the University;
 - Maintain law and order as well as the dignity and prestige of the University.
 - Protect the property of the University;
 - Show due respect to elders, teachers and outside visitors;
 - Work hard and co-operate in completing the courses of study within the prescribed period.

Standard 5-2: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with institutional mission statement. These processes must be periodically evaluated to ensure that it is meeting with its objectives

Equal Opportunity:

The University of Balochistan is an equal opportunity institution, following a policy regardless of religion, race, color, creed, national origin, gender, age, marital status or disability. This policy applies to all programs and facilities including admissions, educational programs and employment.

Faculty Recruitment / Retaining Policy:

The University of Balochistan is committed to retain and develop outstanding faculty who are committed to the mission of the University. To achieve the goal we have devised the following strategies;

- Ensuring that University provides fair, timely selection, appointment / promotion process with HEC criteria.
- Introduction of Tenure Track System, a better incentive attractive / salary package and excellent working environment.
- Giving priority to faculty development through training and support

Appointments / Promotions Procedure:

Basic Pay Scale (BPS):

The Higher Education Commission (HEC) in its meeting held on August 15, 2006 has decided to finalize the Eligibility Conditions under BPS for the appointment of faculty members in the Universities.

a. Lecturer (BPS- 18):

Minimum Qualification:

Master's Degree (first Class) in the relevant field with no 3rd division in the Academic Career from HEC recognized University / Institution. During the next two years (i.e.until June 30th, 2008) if no candidate is available without 3rd division in the academic record, then the University may forward the case for appointment of a selected candidate to the HEC for consideration and approval.

No experience required

b. Assistant Professor (BPS- 19):

Minimum Qualification

Ph.D. in the relevant field from HEC recognized University / Institution, **No experience required**

OR

Master's degree (foreign) or M.Phil. (Pakistan) in the relevant field from HEC recognized University / Institutions, with 4 years teaching / research experience in a recognized university or a post-graduate Institution or

professional experience in the relevant field in a National or International Organization.

c. Associate Professor (BPS- 20):

Minimum Qualification:

Ph.D. in relevant field from HEC recognized University / Institution.

Experience:

10-years teaching / research experience (with at least 4-years experience at the post-Ph.D. level, after 30th September 2006), in HEC recognized University or a post-graduate Institution or professional experience in the relevant field in a National or International Organization.

OR

5-years post Ph.D. teaching / research experience in HEC recognized University or a post-graduate Institution or professional experience in the relevant field in a National or International Organization.

Minimum Number of Publications:

8 research publications (with at least 2 publications in last 5 years) in internationally abstract Journals recognized by the HEC up till 30th September, 2008.

After 30th September, 2008, 10 research publications (with at least 4 publications in last 5 years) in internationally abstract Journals recognized by the HEC

d. Professor (BPS-21):

Minimum Qualifications:

Ph.D. from HEC recognized Institution in relevant field.

Experience:

15-years teaching / research experience (with at least 8 years experience at the post-Ph.D. level till September 30th, 2008) in HEC recognized University or a post-graduate Institution or professional experience in the relevant field in a National or International Organization.

OR

10-years post-Ph.D. teaching / research experience in a recognized University or a post post-graduate Institution or professional experience in the relevant field in a National or International Organization.

Minimum Number of Publications:

12 research publications (with at least 3 publications in last 5 years) up till September 30th, 2008, after September 30th, 2008, 15 research publications (with at least 5 publications in last 5 years) in internationally abstracted Journals recognized by the HEC.

The above Eligibility Criteria is for appointment in all disciplines (excluding Engineering Information Technology, Computing Sciences and Medical Sciences Disciplines) in all Universities and Degree Awarding Institutions.

Appointment under Tenure Track System (TTS):

The University of Balochistan has taken steps in adopting the tenure track statutes “*better incentives for faculty members*”. The University implemented the system since July, 2005 and appointed seventeen (17)

Definition:

Tenure Track System (TTS) contains a Model Tenure Track Process Statutes that specify rules / regulations for appointments / promotions at institutes of higher learning. Following are the abstracts from the Model Tenure Track System Process Statutes provided by the Higher Education Commission:

Spirit of Tenure Track Appointments:

- To create a sense of competition among the faculty.
- To evaluate the productivity of the faculty.
- To make the profession attractive by providing economic security.
- To discourage brain drain from public sector Institution.

Bases for Appointments / Promotions:

Four main areas where a candidate is evaluated for Tenure Track Scheme;

- Teaching
- Research
- Service
- Personal Characteristics

General Criteria for Appointment on TTS:

All faculty members in any discipline are eligible to apply for appointment provided they fulfill the following minimum eligibility conditions;

a. Assistant Professor:

Minimum Qualification:

PhD from a recognized University with excellent communication / Presentation skills.

b. Associate Professor:

Minimum Qualification:

PhD with 6 years post – PhD teaching / research experience in a recognized University.

Minimum Number of Publications:

10 research articles published in journals having impact factor. These journals are now listed in the HEC website www.hec.gov.pk

c. Professor:

Minimum Qualification:

PhD with 11 years post-PhD teaching / research experience from a recognized University.

Minimum Number of Publications:

15 research articles published in journals having impact factor.

Nature of Appointments:

The University may make the following type of appointments:

- Temporary Appointments (for visiting Professors & Research fellows)
- Tenure Track Appointments:
 - a) First Term Appointments.
 - b) Second Term appointments
 - c) Probationary Appointments
 - d) Final Tenured Appointments

Tenure Track Process as per Statutes:

- a) This involves initial term contract for 3 years for Assistant Professor and 4 years for Associate & Professors as probationary period.
- b) Each candidate should provide a comprehensive application, letter of references from PhD supervisor as well as others from eminent researchers in his / her area of specialization and international publications in Journals having impact factor.
- c) Applications should be sent to Technical Review panel to be constituted by the University composed of international academicians / researchers in the relevant area drawn from technologically advanced countries. The same may be provided to HEC (applications as well as name of Technical Panel).

- d) Upon receipt of recommendations, the applications shall be placed for consideration by the Selection Board of the Institution.
- e) The Selection Board will recommend 1st term appointment on tenure track at the level of assistant professor and 1st review occurring after 3 years and final tenure review after six years.
- f) Recommend “probationary’ appointment at the level of Associate / Professor with final review after 4 years.

Tenure Track Scheme is optional and faculty members are free to adopt this scheme.

Pay Package:

<u>Category</u>	<u>Pay scale</u>	<u>House rent</u>	<u>Utility</u>	<u>Minimum Monthly Salary</u>
Professor:	65,000 – 9750	39,000 – 65,000	5% of Pay	107,300
Associate Professor:	45,500 – 6,500	19,500 – 26,000	5% of Pay	67,300
Assistant Professor:	32,500 – 3900	13,000 – 15,600	5% of Pay	47,225

Transferring of Existing Faculty Members to Tenure Track System:

Existing faculty members who are eligible may be considered for appointment on Tenure Track by following the process outlined above.

- If the faculty member is approved by the Institution for appointment on Tenure Track, as per process, as an existing faculty member, and wishes to obtain the higher Tenure Track salary from his first day of appointment, then his case will be referred to the HEC for evaluation by an independent panel of experts of international repute constituted for this purpose.
- In case of positive decision by the HEC panel the faculty members will receive the higher salary from his first day of appointment on Tenure Track, while in case of a negative decision by the HEC panel he/she will continue in his/her current position at the salary he/she is currently drawing, and only

upon successful tenure review he/she would be entitled to get a tenured position in the university at the higher “tenure track pay scale.”

- The faculty member appointment on Tenure Track should continue availing all benefits (pension, gratuity, medical etc.) of his/her previous appointment as calculated using his BPS scale and seniority of service. Universities may make necessary modifications to their rules to allow for this transition.
- In case tenure is not granted after the final review, the faculty member would continue with his/her existing appointment.

Faculty Evaluation Process:

The University of Balochistan has a Standard Operating Procedure for all faculty members to be reported upon. The Annual Confidential Report (ACR) is an important document pertaining to the professional profile of the faculty. ACRs are essential for career development and promotions are based on it.

Standard 5-3: The process and procedure used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure that it is meeting its objectives.

1. Process to ensure teaching and delivery of course material:
 - a. Observing that time table is strictly followed by all faculty members.
 - b. Student feedback on Course Evaluation Questionnaire.

Based on feedback from students on Course Evaluation Questionnaire (Proforma-1). The department of chemistry needs to improve on the following:

- i. Library by providing relevant books
- ii. Classrooms with overhead and multimedia
- iii. Timely access to material on course
- iv. Assessment on course thought
- v. Material provided in practicals

- vi. Laboratories should not be used as class
- vii. Ideas and concepts were not presented clearly by the faculty

Student evaluation needs to be done after every semester or year for continuous improvement. The result of course evaluation of chemistry department is attached for information.

Standard 5-4: 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.

- a. The department ensures that graduate actively participate in practicals and are punctual in their classes by maintaining the attendance of 75% as per University policy. The basic requirement for admission is followed as laid down in the University of Balochistan prospectus.
- b. Student Program Completion Survey (Proforma-2)
The summary of Proforma-2 based on student feedback of the department of chemistry is as follows

Part-1

a) Academic Program:

On completion of the program of study in Chemistry, most of the students agreed that the program was up to their expectation. They agree that there was a good balance of core / optional modules / courses and sequence of courses were logical and built on previous studies. Most of the students agree that they gained knowledge and skills and the program was relevant to further study and future employment. It was the scope of the subject that attracted them to this program. The best feature of the program they found was their interest and diversity of the subject.

b) Learning / Teaching & Assessment:

Most of the students agree with the overall quality of teaching, teaching methods, however they disagree with the amount of assessment test / assignment, it is not a usual practice. They comment that the program could be improved by giving assessment, improving quality of teaching and providing I.T. facilities to students.

Part-2 Your University Experience:

a) Information Services (Library & I.T.):

Most of the students were not satisfied with Library & I.T. facilities, opening hours of the main library, availability of books and journals, online journals and computers on campus, IT Training and advice.

b) Welfare & Student Support:

They seemed dissatisfied with the academic support of student advisor, student information, support and career's advisory services. They commented on the non availability of student council and advice.

c) Campus Services / Facilities:

They were not satisfied with teaching rooms and on campus catering services / shops, entertainments and sports facilities.

d) Overall University Experience:

Most of the students have shown their satisfaction with overall University experience, however they felt that political organization and union strikes were impacting negatively on their studies. They felt that the best feature of their university experience was that they learnt a lot from teachers and the chemistry department was the best. This experience could be improved by providing academic environment, dedicated and qualified teachers, academic sessions to be on time and by arranging seminars and presentations.

Demographic Information

- a) Mode of Study: Post graduate 100%
- b) Full/part time study: Full Time 100%
- c) National Status: Pakistan (100%)
- d) Gender Female: 7 Male: 13
- e) Total 20 students

CRITERION - 6

Faculty

Criterion - 6 Faculty

Faculty members of chemistry department must be current and active in their discipline and have the necessary technical depth and breathe to support the program. There must be enough faculty members to provide continuity and stability, to cover the curriculum adequately and effectively. To meet this criterion the following standards must be satisfied.

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 Ph.D. degree in the discipline

Following table shows the distribution of faculty in various specializations

Table: **Faculty distribution by program areas**

Program area of specialization	No. of Papers	No. of Faculty	No. Faculty with Ph.D. degree
Analytical Chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	4	2
Bio-chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	2	2
Inorganic Chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	3	2
Organic Chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	7	1
Physical Chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	5	3
Environmental Chemistry	M.Sc (Prev) =1 M.Sc (Final) =3 Practical =1 Thesis =1	Nil	Nil
Total		21	10

Faculty members are required in section like Bio-chemistry, Inorganic, Environmental and Analytical Chemistry.

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

- a) Faculty members of the chemistry department are considered current in the discipline based on the following criteria:
 - i. Publications in HEC recognized journals or journals having impact factor
 - ii. Participation in seminars, conferences at National / International levels
 - iii. Research proposals for funding and linkage with other Institutions / Industry
 - iv. Taking classes, involved in research and reading new books in the relevant filed
- b) Faculty development program at department level:
 - i. The department invite lectures from eminent scholars on various topics of chemistry for its students and faculty at National level.
 - ii. Organize workshops, seminars and conferences.
- c) Faculty development program at Institutional level:

Centers for Training and Research:

The University of Balochistan has established Centers for faculty training and research. These centers play an important role in faculty development by organizing professional activities such as workshops, seminars and conferences. In order to improve the academic and professional expertise of the faculty, the Center plans training activities and guidance for research.

Faculty Training Center:

Faculty Training Center established in 2007 is responsible to organize trainings, refresher courses, seminars and workshops. Training on regular basis is conducted by the center for capacity building of the faculty.

Faculty Research Center:

Faculty Research Center is established in 2007 with the objective to develop research culture in the University and linkage with National and International organizations for enhancement of research activities.

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

To help the faculty of chemistry department in their progress to excel in their profession, the department and institution devised the following strategies;

- I. Ensuring fair, timely selection, appointment / promotion as per HEC criteria
- II. Providing Tenure Track salary package
- III. Excellent working environment
- IV. Faculty development through faculty training and research training centers.
- V. Research awards

CRITERION - 7

Institutional Facilities

Criterion – 7 Institutional Facilities

Institutional facilities, including library, clean rooms and offices must be adequate to support the objectives of the program. To satisfy this criterion, the following standards must be met;

Standard 7-1: The Institution must have the infrastructure to support new trends in learning such as E-learning

a) Departmental library

The departmental library is managed by a qualified librarian and has over 2000 books covering a wide range of disciplines in Chemistry for teaching and research purposes. These books are in addition to more than 2000 Chemistry books stocked in Central Library of the University. In 2007 about 300 books of latest addition have been purchased for the seminar library. The departmental library also has a vast collection of international research journals. The library has been computerized completely.

Internet Facility

The internet facility is available in all laboratories, library and rooms for the teachers. A large number of international research journals are also available on Digital Library provided by Higher Education Commission and research article of interest can also be downloaded.

b) Main Library

All faculty members and students of chemistry department are allowed to use the main library even after normal hours. The main library provides the following services;

- i. Course books
- ii. Internet
- iii. Digital library with 30 computers having access to 2300 journals and 40,000 E-books

c. Offices

The department of chemistry has enough space to accommodate faculty. However, separate offices for individual faculty to be arranged.

d. Class Rooms

The department has four classrooms and one conference room for organizing seminars. There is a shortage of classrooms as this department offers five different specializations. For this purpose the University has constructed a new block close to the main department that will provide further space for laboratory classrooms and offices.

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 has over 2000 books covering a wide range of disciplines in chemistry for teaching and research and collection of old journals. Following are the steps to be taken to improve;

- a) Computerization of library
- b) Providing at least five International journals in various disciplines of chemistry
- c) Recent books in various specializations
- d) Training of departmental librarian

Standard 7-3: Class rooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibility

Classrooms:

The department offers five specializations in chemistry and an additional subject of Environmental Chemistry. At present it has 4 classrooms and one conference room. Two more classrooms equipped with whiteboard, overhead

projector and multimedia. There is only one multimedia fixed in the conference room and is not sufficient for faculty and students.

Faculty Offices:

The total number of faculty is 23 and majority have been given a separate office and office equipment. However, two junior faculty members are accommodated in one room. However, construction of new laboratories, offices and class rooms are in progress to meet the requirement.

CRITERION - 8

Institutional Support

Criterion – 8 Institutional Support

The institution's support and the financial resources for the program must be sufficient to provide an environment in which the program can achieve its objectives and retain its strength.

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 teacher and scholars

The department of chemistry has sufficient laboratory facilities, qualified faculty which provide an opportunity for junior faculty and students to maintain competence. The financial resources for regular purchase of chemicals, glass wares and books are very limited which needs to be enhanced. However, senior faculty members are in a position to get funds through research proposal from various organizations. From the last couple of years HEC has been very generous to strengthen our laboratories and libraries. The major financial source is the University which allocates budget for department and the University rely on HEC funding.

Standard 8-2: There must be an adequate number of high quality graduate students, research assistants and Ph.D. students

The following table shows the number of students in each program:

Degree Program	Year		
	2005	2006	2007
M.Sc	110	110	110
M.Phil	4	5	7
Ph.D.	2	3	5
Research Assistant	Nil	Nil	Nil
Student / Teacher Ratio	1:10	1:10	1:10

Standard 8-3: Financial resources must be provided to acquire and maintain library holding, laboratories and computing facilities

The University of Balochistan provides resources to maintain library, laboratories and computing laboratory.