SUBJECT REVIEW REPORT

DEPARTMENT OF BOTANY

FACULTY OF SCIENCE
UNIVERSITY OF PERADENIYA

27th to 29th January 2009

Review Team :

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1. SUBJECT REVIEW PROCESS

Universities are public institutions. They hold and must conscientiously exercise and be seen to exercise their responsibility for quality standards. Universities and the other higher education institutions should play a crucial role in contributing to the knowledge based economic development of Sri Lanka. Therefore, the accountability for quality and standards is a key factor in promoting and safeguarding public confidence in Sri Lankan higher education.

The national committee on quality assurance in higher education, the Quality Assurance and Accreditation Committee (QAAC) of the University Grants Commission (UGC) has agreed that the following components of each higher education institution should be reviewed on the guidelines published in the quality assurance hand book for Sri Lankan universities.

1. **Institutional Review**: Analysis and testing of the effectiveness of an institution's process for managing and assuring the quality of academic activities undertaken by the institution.
2. **Subject Review**: Evaluation of the quality of education within a specific subject or discipline at programme level, it is focused on the quality of students learning experience and on student achievement. Subject review evaluates the quality of both undergraduate and postgraduate programmes. On a request made by the quality assurance specialist, a review of the subject Botany in the Faculty of Science of University of Peradeniya was conducted from 27 -29th January 2009; at the Department of Botany. The review team appointed by QAAC of UGC, consisted of the following:
   Prof. S. Widanapathirana, (Chair), University of Kelaniya
   Prof. Ravi Wijesundara, University of Colombo
   Prof Sanath Hettiarachchi, University of Ruhuna

The specific aspects examined in this review were as follows;

1. Curriculum design, content and review
2. Teaching, learning and assessment methods
3. Quality of students including student progress and achievement
4. Extent of student feed back, Qualitative and Quantitative
5. Postgraduate studies
6. Peer observation
7. Skills development
8. Academic Guidance and counseling

The review team was provided with the self evaluation report (SER) prepared by the Department, before the review visit. The primary source of documentary information for the subject review came from this report. In addition an audio visual presentation of the content of this document was presented by the Head of the Department of Botany on the first day of the arrival of Review team.

In addition, the review team was provided with a variety of relevant documents; which substantiated the claims made in the self evaluation report. These included the university calendar, a publication of the Faculty of Science containing details of the course unit system, syllabi of courses, samples of student work, question papers, answer scripts, marking schemes, practical handouts, feedback from undergraduate students, peer observation reports,

minutes of departmental meetings and staff student committees, Postgraduate and Undergraduate project reports.

The review team on the first day met the Vice-Chancellor and the Dean of the Faculty of Science in the VC office and also had fruitful discussions with members of academic staff, undergraduate students, postgraduate students, non-academic staff during the course of the review. The team also visited laboratories, lecture theater, plant house and research sites. The review team was provided with the opportunities for observing lectures in progress, practical classes and students' presentations.

On the last day, the review team had a final meeting with the entire academic staff of the Department to discuss and verify the observations and judgments made by the team.

2. BRIEF HISTORY OF THE UNIVERSITY AND THE DEPARTMENT

The establishment of the University of Peradeniya, originally named as the University of Ceylon, was legally sanctioned by the ordinance No.20 of 1942. However, due to various reasons, the opening of the University at Peradeniya was delayed. The seat of this university was in Colombo. The date of transfer of Faculties from Colombo was postponed from 1948 to 1950 and then to 1952. On the 6th of October 1952, the University of Ceylon was officially declared open at Peradeniya. With this event, the faculties of Arts and Oriental studies and the Departments of Law, Agriculture and Veterinary Science started functioning at Peradeniya, while Faculties of Science, Medicine and Engineering continued to be in Colombo pending the completion of the 2nd and 3rd phases of building programmes at Peradeniya. With these phases of development completed, the rest of the Faculties were established at Peradeniya and the University of Peradeniya started functioning as a unitary university.

With the enactment of the university act No.1 of 1972, all universities in existence in Sri Lanka at that time became campuses of one single university namely the University of Sri Lanka. Thus the University of Peradeniya became the Peradeniya Campus of the University of Sri Lanka with effect from 15th February 1972. In 1978, when the University Act No. 16 of 1978 was enacted, the Peradeniya campus became the University of Peradeniya and again started functioning as an autonomous university.
Today, the University of Peradeniya is the largest University in Sri Lanka, located in an area of 700 ha of land with a picturesque landscape and consists of eight Faculties, namely Faculties of Allied Health Science, Arts, Dental Sciences, Engineering, Medicine, Science, Veterinary Medicine and Animal Science and provides the most complete range of undergraduate education in Sri Lanka. In addition, the university has two postgraduate institutes affiliated to it, the Postgraduate Institute of Agriculture and the Postgraduate Institute of Science. The University currently has 757 academic staff, 8952 undergraduate students and 1862 non-academic staff.

The Faculty of Science was established at Peradeniya in July 1961. At present, the Faculty of Science has eight academic Departments- Botany, Chemistry, Geology, Mathematics, Molecular Biology and Biotechnology, Physics, Statistics and Computer Science and Zoology and two units- Science Education unit and English language teaching unit.

3. AIMS AND LEARNING OUTCOMES

The Department of Botany offers courses for undergraduates following different B.Sc Degree Programmes, namely, B.Sc General Degree, B.Sc Special Degree in Botany, B.Sc Special Degree in Biology, B.Sc Degree in Applied Sciences and several postgraduate courses through the PGIS. The Department also conducts short courses and workshops as outreach activities. All academic programmes and examinations are conducted in English medium.

3.1. Aims

- To continue to strengthen academic programme, widen their scope and expose the students advancing knowledge.
- To provide opportunities for students to develop transferable skills and self learning ability.
- To create a more conducive environment than now for academic and research activities, while increasing the student intake within reasonable limits by improving human and physical resources and other essential services.
- To improve access of high quality education programme and research by fostering partnerships within and outside the university.
- To provide adequate materials to students for individual study.
- To provide support for staff in career development.

3.2. Learning Outcomes

On successful completion of the course the students are expected to;

- have a good knowledge and understanding of basic concepts of plant sciences and related disciplines.
- have laboratory and field skills in studying the plant and plant communities, their conservation, management and on site identification.
- have developed self-learning ability to acquire new knowledge in advancing and emerging field of plant sciences.
- have good communication skills, analytical thinking confidence to independently pursue a career of their own interest and contribute to national development.
- be able to successfully complete for employment and postgraduate education within the country and overseas and
- be aware of social responsibility, work ethics, each others needs and team work.

4. FINDINGS OF THE REVIEW TEAM

4.1. Curriculum Design, Content and Review

Curricula of all degree programmes offered by the Faculty are constructed on a semester based course unit system. The students entering the Biology stream follow a common study programme offered by various departments in the year 1 and 2. These courses are well designed to give students a good knowledge and understanding of the basic concepts of plant sciences and other related fields in Biological sciences and, are in full conformity with the intended learning outcomes of students expected by the Department and spelled out in the self evaluation report.

The students are given adequate flexibility to choose, on merit or otherwise several different degree programmes. The curriculum content of all the course units offered by the Department reflects adequate academic standards and enables the student to achieve the intended learning outcomes in the form of knowledge and understanding of the subject matter and development of interpersonal skills.

The advanced course modules offered by the Department such as Plant Systematics,
Post-harvest Technology of fruits and vegetables, Biodiversity conservation and management Food science, Plant pathology etc. are intended to produce specialist such as Plant pathologist, Biodiversity management experts, horticulture managers etc. Who would be able to address key issues related to biodiversity related environmental management and pest and disease management of agricultural crops in the country.

Practical classes, filed visits, assignments, presentation, enrich the experience of students and promote students learning and development of practical skill, other interpersonal and social skills, their ability to work in groups, etc.
The reviewers particularly appreciated the opportunity given to both general and special degree level students to pursue a course of independent study, which motivates students to acquire a variety of skills, such as information gathering, independent work, and computer skills and presentation competencies.

The curriculum content of both basic courses and advanced courses units are of sufficient breadth and depth in terms of subject coverage.

Reviewers were particularly happy to observe the flexibility given to 3rd years students, to enroll in the Applied science degree programme. The curriculum of this programme is intended to produce specialists needed for the industrial and environmental sector in the country.

It is the reviewers opinion that the program and the facilities available, particularly for Bioscience students in the industrial sectors, should be carefully monitored by industry experts and academic adviser in the Department, in order to achieve the best results.

The frequency of curriculum revision was specially mentioned in the SER. The minutes of departmental committee meetings, Faculty minutes and the discussions with the academic staff indicated that there have been timely curriculum revisions. The reviewers particularly noted that a workshop has been organized with all stakeholders including the private sector before the fourth year Applied Science curriculum was developed.

The reviewers are convinced that the curriculum design and content adequately incorporate recent developments in Biology/ Plant Sciences and address the needs of the students following the subject and also enable students to achieve intended learning outcomes of the programme under review.

In relation to the curriculum design, content and review, the judgment of the team is GOOD

4.2. Teaching, Learning and Assessment Methods.

The academic staff of the Botany Department consists of highly qualified, experienced and committed personnel as seen by their scientific achievements, involvement of research, extensive preparation for and the delivery of teaching components. The curriculum of each module, well written with brief course contents and reference books and methods of assessments, rules and regulations governing examinations is provided to students in the handbook of course unit system published by the Faculty of Science. However the Review team noted that the general learning outcomes of the subject/ discipline and the specific learning outcomes of the modules are not given in this hand book.

It is the well considered opinion of the reviewers that the intended learning outcomes, which is one of the key features of curriculum planning should be included in this hand book too. But, the self-evaluation report submitted by the Department, which contained the details of the curriculum in much more detail with the intended learning outcome of the course units, observation of teaching and learning process of students, examination of sample of student work enabled the review team to conclude that the teaching, learning and assessment methods used by the Department are well organized and executed to facilitate the acquisition of the intended learning outcomes by the students.

There is a diversity of assessment methods used by the Department. The Department follows the Faculty guidelines for the assessment of theory components, practical components, field work and project work. The mode of assessment in the opinion of the reviewers is very comprehensive and has been consistent. This is a strong feature of the Department.

It should be mentioned that during meeting between students and review team the students expressed great satisfaction with the courses conducted by the Department and in general about the teaching, learning process. They were also very pleased that the Department conducts a mid semester examination, which motivate the students to pay attention to a continuous learning process throughout the semester.

The students also were of the opinion that their work loads are reasonably balanced and that they are not overburdened. The review team was very pleased to hear such comments from the major stake holders of the programmes.

However the review team strongly felt the need of having one or more external examiners for the modules or the entire examination process, for transparency and quality assurance of the degree programme to **comply with the expectation of the quality assurance system recommended by the QAAC of the UGC.**

This is an indispensable vital component/ criterion which has been repeatedly mentioned, under many aspects of the review in the Quality Assurance handbook. It is therefore suggested that external examiners contribution is obtained, wherever it is relevant.

In relation to the teaching, learning and assessment methods the judgment of the team is SATISFACTORY

4.3 Quality of Students including Student Progress and Achievements

Admission of students to the Biological Sciences program is through the UGC based on the national policy on University admission. The z-score of the present students of the Faculty of Science as given in the self evaluation report (SER) ranges from 0.93 to 1.41. The average Z-score of the Biological Science students is higher than that of the Physical Science students. Out of the student intake, the majority are from the Central and the adjacent provinces. From the interactions the review team had with the undergraduate students it became evident that a large majority of the students command a satisfactory level of proficiency in English. The satisfactory level of English in the answer scripts perused by the review team confirmed the above fact. Upon admission to the Faculty the students undergo an intensive course in English which is delivered at different levels depending on their knowledge of English determined at a placement test. The students expressed satisfaction with the intensive English program offered by the Faculty.

Apart from the English program the students also follow Foundation Courses before the commencement of the academic program. The Foundation Courses include Computer Applications and Mathematics for Biological Science students. The students expressed satisfaction about the Foundation courses and were of the view that they were useful and relevant.

Further, on admission the students are clearly informed about the study programs and other required details by the Head of the Department. Thereafter, prior to the start of the academic program the students are briefed about the course unit system, credit requirements, selection of course combinations, courses, examination procedure and attendance requirements. The students are also given the Faculty Handbook which comprehensively describes the above details.

In year 1 the Biological Science students are offered Biology I, Biology II, Chemistry Computer Science and Statistics. The Biology program is offered jointly with the Department of Zoology. From year II onwards Botany is offered as a subject.

The Biological Science students who satisfy the requirement to follow a special degree program are given a chance to apply for admission at the end of the 2nd year (Faculty Handbook, 2008). The students for the special degree in Botany are selected based on their marks in the first two years in the subject of specialization, performance in the Foundation Courses, an interview, interest in the subject and competence in English. As a result students with promise, potential and motivation are admitted to the special degree programs in the Department.

Student performance for each course offered by the Department is assessed through on-going tests, mid-semester examinations and end-semester examinations. The students are given a feed-back on their performance at the on-going and mid-semester examinations. The corrected answer scripts are given back to the students so that the students are able to gauge their strengths and weaknesses. The review team was of the opinion that this was a good practice.

Student attendance is continuously monitored both at lectures and practicals. The students are generally not allowed to sit mid and end-semester examinations unless the attendance is at least 80% at lectures. However, the Department has found it difficult to enforce this rule

rigidly as some students either follow part-time professional courses or are employed. In the laboratory component the students are rewarded for attendance. In the continuous assessment scheme attendance carry 10% of the total mark. The Department reports that this practice has led to a significance increase in attendance at laboratory classes.

The introduction of the course unit system has led to a significant increase in student performance at the special degree program (annex 12, SER). The number of students obtaining classes has increased over the past 4 years. During the period 2004 to 2008 all students in the Botany special degree program has obtained classes with 30-40% obtaining 1st classes. This is undoubtedly due to the quality of the students and the excellent guidance given by the staff.

In the General degree programme, a similar improvement is not seen (Annex 12, SER). In fact, the number of 1st classes has decreased, with only one between 2004 and 2008. The total number of second classes, however, has marginally increased with the introduction of the new system. The overall failure rate of the General degree students is about 20%. But, in Botany, according to the information provided by the Head of the Department, the failure rate is extremely low with about one student per batch. The Faculty has identified that most of the failures are those who do not attend classes regularly and involved in other activities or those with personal / family problems.

From the evidence provided the review team was convinced of the good academic performance of the undergraduates following Botany as a subject.

Incentives are provided for students to perform well at examinations. Awards are given for outstanding performances in the name of distinguished Professors and scholars. Professor MD Dassanayake cash prize is awarded for the best performance at the second year Botany courses, Professor MD Dassanayake gold medal is awarded to the student who performs best at the special degree examination and Coomaraswamy Prize is awarded for the best performance in Biological Sciences in the General degree.

The Department and the Faculty provides ample opportunities for the students to improve general attitudes, self-confidence (through the course on independent study, field classes and in the special degree program the research project) and ethics (through a foundation course in year 1). The review team during the meetings with students observed the self confidence of the students and also good attitudes.

The discussion with the students following the special degree program revealed that a majority of special degree graduates obtain post-graduate research opportunities overseas mainly in the USA. Most of the others take up post-graduate studies in Sri Lanka. Hence, the main objectives of the special degree students appear to be to pursue higher studies in Botany. This, the review team felt, is further evidence of the high level of academic standards maintained by the Department in the special degree programs.

Many General degree students find employment soon after graduation (SER). Others take up teaching at International Schools or start GCE (AL) tuition classes until they find permanent employment or start post-graduate studies. There has been a gradual increase in the number of General degree students pursuing post-graduate studies.

In relation to the quality of students, student progress and achievements the judgment of the team is GOOD

4.4. Extent and use of Student Feedback

The quality of each course and its delivery is evaluated by the students independently at the end of the course through a Teacher Evaluation Form (annex 13 SER). The relevant staff member distributes the form at the end of the course and forms duly completed by the students are collected by a Technical Officer and handed over to the Head or the Lecturer concerned. The form is simple, easy for the student to comprehend but has the required coverage. A sample of the completed forms was perused by the reviewers and a large majority of students has clearly expressed satisfaction on teaching and learning aspects. The comments of the students were encouraging. The review team also noted that the forms are duly filled and analyzed. The Head of the Department informed that the teachers study the comments of the students and make the necessary adjustments and improvements.

The Faculty also has initiated a Student Consultative Committee. The Committee is chaired by the Dean and includes Heads of Departments and student representatives from all batches. The objective of the Committee is to obtain students' view on academic programs and related matters. The review team felt that if such a Committee is established at the Department level, the effectiveness would be greater.

It was also revealed that the Department obtains a student feedback qualitatively during laboratory classes, field classes and through the Botanical Society. During the meetings with the academic staff and demonstrators it became apparent that a very useful feedback is obtained during field classes most which are on locations outside the University.

In relation to the extent and use of student feedback the judgment of the team is GOOD

4.5. Postgraduate Studies

The Department offers ample opportunities for students to pursue postgraduate studies. The postgraduate programs and research in the Department has steadily increased over the years and at present is at very commendable level. The Department is exceedingly strong in areas such as Forestry, Ecology, Plant Taxonomy, Post-Harvest Pathology and Technology and has earned recognition in both Sri Lanka and overseas.
All post graduate programs in the Department are conducted in collaboration with the Postgraduate Institute of Science (PGIS) according to the rules and regulations of the PGIS. Since 1996 the Department has introduced five MSc programs. They are,

Post Harvest Technology of Fruits and Vegetables
Plant Science
Medical Microbiology
Wild Life Conservation and Management
Biodiversity Conservation Management

Only the first three of the above programs are currently in operation (annex 14 SER). The programs are advertised annually and the students are selected by an aptitude test and an interview. The programs are conducted by members of the Department and resource persons from other Institutes. Each program consists of 30 credits, 24 from course work and 06 from a 06-month research project. Students who successfully complete the 24 credit course work

but do not complete the research component become eligible for the PG diploma. Since all MSc programs are held during week-ends the review team did not get an opportunity to meet MSc students.

Thirty one students are currently registered for research degrees (MPhil and PhD) in Plant Science. They come under the purview of the Board of Study in Plant Science of the PGIS. Most of these students carry out their research work in the laboratories of the Department and are supervised by members of the staff. The Department has adequate senior academics with strong research backgrounds to supervise the research students (annex 3 SER). The research capabilities of the staff are demonstrated by the research awards and the large number of publications in peer reviewed foreign and local journals (annex 5 & 6 SER).

All the research students are funded through grants obtained by their respective supervisors. The granting agencies include many foreign and local agencies (annex 5 SER). The reviewers were highly impressed with the amount of research funding obtained by the members of the academic staff.

The Department has well equipped research laboratories which are very spacious (annex 7 SER). The laboratories are used for both post graduate research and undergraduate research. Each major area of specialization within Botany has a designated research laboratory. Most of the major equipment in the research laboratories has been obtained through the research grants of staff members.

The review team was able to meet some of the research students carrying out their research work in the Department. The students were generally satisfied with the facilities available and the supervision provided. The aspects which need attention, according to the students, are availability and access to computers and journals and procedures involved in procuring consumables required for their work. Several of the students have undergone additional training either locally or overseas and attended workshops related to their work. The students also have opportunities to communicate their work through the annual sessions of the University. The students are evaluated periodically, at least every 6 months, through a Thesis Committee. The Committee consists of three/four persons competent in the area of study and includes the Head of the Department and the supervisor/s (annex 17 SER). Prior to the meeting the student has to submit a progress report. This practice monitors the progress of the student very efficiently. The students find the process very useful. The review team was impressed with the practice.

The rate of completion of the research degrees appear to be on the high side (annex 16 SER). During the 12 year period between 1996 and 2008 the Department has produced 6 PhDs, 23 MPhils, 68 MScs and 4 PG Diplomas. The output is very commendable.

In relation to the postgraduate studies the judgment of the team is GOOD.

4.6. Peer Observation

The Department has recently started practicing a formal peer observation process. The form used in peer observation was provided with the SER in annexure 15 and the Reviewers had observed samples peer observation reports at the site visit. In addition to this, the Department has had a tradition of informal peer involvement conducting laboratory classes, joint supervision and evaluation of research projects, and moderation of question papers. In

addition, the methods used by different staff members are discussed in Departmental meetings. The recently introduced course unit – independent study – has also created opportunity for involvement of peer.

In relation to peer observations the judgment of the review team Is GOOD

4.7. Skills Development

In the present context, skills development is considered as an essential component of University education. The Universities and their academic Departments make attempts to instill various skills in the student population, and it is encouraging to note that the Department has introduced several approaches to fulfill this requirement. As evidenced at the meetings with students, the students too have a clear understanding of the importance of skills development and apparently making use of the opportunities given by the Department.

The SER has elaborated on the methodologies followed by the Department, both within and outside the curriculum in this respect and the Reviewers were presented with evidence to support the claims made. Such activities are summarized below:

- Assignments – critical thinking, reading and report writing skills and interpersonal skills Working in groups – social sensitivity and ethical rectitude
- Field visits – students are given the responsibility of planning the visits, multitude of skills including communication skills, skills needed for working in groups
- Laboratory experiments - research and technical skills development in Special Degree students
- Talks and workshops by staff members and visiting scholars – Listening and comprehension Knowledge of current developments in Biology and related fields
- Independent study (compulsory for Special Degree and optional for General Degree) – reading, writing, critical thinking, presentation, language and computer skills
- Functions of the Botanical Society – leadership, organizational, writing of articles etc.

During the discussions with students, it was revealed that students have developed the ability to communicate in English language. They also mentioned that they have been provided with computer skills and senior students are capable of handling a computer for word processing, data analysis, presentations and internet and email access. The special Degree students are provided with computer facilities with internet access. The undergraduate and postgraduates research reports and thesis observed by the Reviewers were of high quality and can be taken as evidence for the success of the attempts made by the Department to support the skills development in students.

The Department had had a tradition of sending Special Degree students for vacation training to government and private sector organizations, but after the introduction of Course Unit system, it has become difficult to allocate time for such activities except for a short period at the end of the academic year.

The Reviewers are pleased to note that the curriculum of the Department of Botany is designed to facilitate skills development of students and that the assessment methods are in place to evaluate students' personal skills in addition to their subject knowledge. Reviewers were given the opportunity of listing to a presentation made by a student under the 'independent study' course unit, and the presentation was of high standard.

In relation to the skills development the judgment of the team is GOOD.

4.8. Academic Guidance and Counseling

The scheme of assigning a student advisor for each student has not been a success according to the SER, yet a few students may have benefited through this. Faculty has appointed an academic advisor and student counselors. The Department admits in their SER that there is no systematic counseling program, but claims that students can approach the staff if they desire to obtain any type of assistance. The students confirmed that the staff is available if they want to obtain advice on academic as well as other matters. One staff member is serving at present as a student counselor for the Faculty.

The students have access to professional counseling and the staff in general and the students counselors in particular direct the students to this counseling service when necessary. It appears that the staff is more than willing to help students in all aspects of their student life, and therefore the reviewers were happy that a mechanism is in place for addressing students' personal problems through counseling.

The Faculty has produced a prospectus for students with ample information and distributed among them. This provides them with all basic information on academic matters required for their orientation and finding their way during the Undergraduate period. Students confirmed that there are two orientation programs: one in year 1 and the other in year two.

The existence of a staff-student consultative committee is a positive move. The return of the answer scripts for the perusal of the students in mid-semester examination is commendable. The students have the opportunity to discuss with peer or staff to clesr any doubts about the subject matter.

Students have the opportunity of taking courses outside the science disciplines. This certainly broadens the intellectual horizons of students and provides them with competencies in a variety of areas.

Discussing with students, observing student presentations, teacher profiles, convinced the review team that arrangements for academic guidance of the students have certainly lead to the enhancement of progress and achievements of the students.

In relation to academic guidance and counseling the judgment of the team is GOOD.

Based on the observations made during the visit by the review team the eight aspects were judged as follows:

Aspect Reviewed	Judgment Given
Curriculum design, Content and Review	Good
Teaching Learning and Assessment Methods	Satisfactory
Quality of Student including Student Progress and Achievements	Good
Extent and Use of Student Feedback	Good
Postgraduate Studies	Good
Peer Observation	Good
Skills Development	Good
Academic Guidance and Counseling	Good

5. CONCLUSIONS

1. Curriculum Design, Content and Review

Strengths/Good Practices

- Well design curriculum with adequate flexibility

Overall judgment: **Good**

2. Teaching, Learning and Assessment Methods

Strengths/Good Practices

- Mid semester examinations assessment procedure

Weakness

- Absence of external examiners

Overall judgment: Satisfactory

3. Quality of Students, including Student Progress and Achievement

Strengths/Good Practices

- Obtaining student's feedback on assessments of mid-semester examinations

Overall judgment: Good

4. Extent and Use of Student Feedback

Strengths/Good Practices

- Continuous process of teacher evaluation by students

Overall judgment: Good

5. Postgraduate Studies

Strengths/Good Practices
- Nationally and internationally renowned researchers in the Department.
- Monitoring of postgraduate research by a Faculty Thesis committee.

Overall judgment: Good

6. Peer Observation

Strengths/Good Practices
- Formal peer observation is in place
- Departmental meetings are used as opportunity to discuss methods adopted by staff in teaching and evaluation
- Invited examiners take part in progress review meetings of postgraduate research

Overall judgment: Good

7. Skills Development

Strengths/Good Practices
- Staff members with good research background
- Introduction of the course unit 'Independent Study'
- Organization of field visits, field classes and other activities where students can take part as a group
- Being able to get satisfactory services from ELTU and Computer unit
- Being able to provide sufficient computer facilities with internet access

Overall judgment: Good

8. Academic Guidance and Counseling

Strengths/Good Practices
- Staff- student consultation committee

Overall judgment: Good

6. RECOMMENDATIONS

- Establishment of a **Departmental committee** of staff and students (Staff Student Liaison Committee)
- Appointment of one or more external examiners **to strengthen** the quality assurance procedure of the Department
- To consider the possibility of sending Special Degree students for **industrial training** as practiced before the introduction of course unit system

7. ANNEXES

Annex 1. AGENDA FOR THE REVIEW VISIT

Day 1: Tuesday 27th January, 2009

8.30- 9.30 a.m.	Meeting with the Vice-Chancellor, Chaiffi1an/IQA unit, Dean/ Science, Head/Botany, Head/QA Cell
9.30 -10.00 a.m.	Discuss Agenda for the visit
10.00- 10.30 a.m.	Tea 10.30 -11.30 a.m. Department Presentation on Self-Evaluation Report
11.30- 12.30 p.m.	Discussion
12.30- 1.30 p.m.	Lunch
1.30 -2.30 p.m.	Meeting with the Department Academic Staff
2.30- 3.15 p.m.	Observing Department Facilities
3.15- 3.30 p.m.	Tea
3.30- 4.00 p.m.	Observing Department Facilities (Continuation)
4.00- 4.30 p.m.	Meeting with 200 level undergraduate students
4.30- 5.00 p.m.	Visit to outdoor facilities for teaching
5.00- 5.15 p.m.	Brief meeting of Reviewers

Day 2: Wednesday 28th January, 2009

8.30- 9.00 a.m.	Observing Teaching -Lecture BT 205 Angiosperm Morphology and Anatomy (Prof. Nimal Gunatilleke)
9.00- 10.00 a.m.	Meeting with Postgraduate Students
10.00- 10.30 a.m.	Observing Teaching -Practical class: BT308 Plant Systematics (Dr. Deepthi Y akandawala)
10.30 -10.45 a.m.	Tea
10.45 -11.15 a.m.	Observing Teaching -Practical class: BT309 Biodiversity Conservation & Management (Dr. Anoma Perera)
11.15 -12.00 Noon	Observing Documents.
12.00 -1.00 p.m.	Lunch
1.00- 1.30 p.m.	Observing Other Facilities (Science Library, PGIS)
1.30 -2.30 p.m.	Observing Documents (Continuation)
2.30- 3.00 p.m.	Observing Teaching -Lecture BT 401 Nitrogen fixation (Professor S.A. Kulasooriya)
3.00- 3.15 p.m.	Laboratory and Garden staff
3.15- 3.30 p.m.	Tea
3.30- 4.00 p.m.	Meeting student Counselors, Academic Advisors
4.00 -4.30 p.m.	Meeting with 300 Level Undergraduates 3rd year Special student presentations
4.30- 5.30 p.m.	Meeting with 400 Level Special Degree Undergraduates
5.00- 5.30 p.m.	Brief meeting of Reviewers

Day 3: Tuesday 29th January, 2009

8.00- 8.30 a.m.	Observing Teaching -Lecture BL 102 Plant and Animal Form & Function (Dr. Malkanthi Daundasekara).
8.30 - 9.00 a.m.	Observing Teaching -Lecture BT412 Applied Microbiology (Dr. Charmalie Abayasekara)
9.00 -10.00 a.m.	Meeting with Technical Staff
10.00 -10.15 a.m.	Tea

10.15 -11.00 a.m.	Meeting with the Demonstrators
11.00 -11.30 a.m.	Reviewers Private Discussion
11.30- 12.30 p.m.	Meeting with the Head and Staff for Reporting
12.30- 1.30 p.m.	Lunch
1.30- 5.30 p.m.	Report Writing

Annex 2. LIST OF FACILITIES OBSERVED

- Student practical laboratory
- Laboratories and equipment/ facilities
- Research laboratories
- Microbiology and Molecular Biology facilities

Annex 2. LIST OF DOCUMENTS OBSERVED

- University calendar
- Faculty Handbook/ Course Unit
- Question papers and answer scripts
- Handouts, Lecture notes (Power Point Presentations)
- Handouts for laboratory practical classes
- Faculty Board minutes
- Student Staff committee reports
- Feedback of students/ Evaluation of teacher performance by students
- Information on postgraduate studies, Research, Thesis, etc
- Students Thesis/ Project work