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Self-Assessment Report for BS (Software Engineering)

University Institute of Information Technology

BSSE Degree Program

July, 2017-2019

Self-Assessment Report

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INTRODUCTION

Information Technology (IT) plays an important role to improve the efficiency and quality of service and has thus emerged as an integral component of every field. In the forthcoming and a knowledge revolution era, its role is even more pronounced. Only those countries, which will have a computer science (CS) and IT skilled manpower, will survive and succeed. University Institute of Information Technology (UIIT) was established in 2001 to address this terrible need. UIIT is producing CS/IT graduates who are well versed to provide IT based solutions to the problems for all the sectors in general and for Agriculture sector in particular.

The market needs committed professionals in IT and computer science. Bachelors in Software Engineering (BSSE) was offered in 2017 to meet the desires of a market. The main purpose of the BSSE degree program is to provide an opportunity to the students having fourteen years of education to acquire up-to-date technical knowledge; marketable skills, professional competencies and valuable expertise in the rapidly advancing field of Information Technology to ensure a prosperous future. The program produces graduates who will be flexible, adaptable to change, and able to face the challenges of the technology driven employment market. The degree comprises of a set of core courses, science courses, general education & supportive courses.

CRITERION 1: PROGRAM MISSION, OBJECTIVES AND OUTCOMES

The course contents are regularly revised and updated with the latest developments in the field of Information Technology. The recently emerging tools and technologies have been included in the syllabus. The institute provides a variety of study programs such as Databases, Programming, Web Design and Development, Networking, to enhance student's professional training and career opportunities. It holds national seminars to exchange knowledge and information. The self-assessment is based on a number of criteria that are described below.

Standard 1-1: The program must have documented measurable objectives that support institution mission statements.

Mission Statement:

The mission of BSSE program is to prepare students as professionals by imparting high quality education in the field of computing. Graduates of the program will take appropriate professional

positions in industry and organizations, or pursue higher education and research in related disciplines. The main elements of strategic planning to achieve mission and objectives.

Program Objectives:

The main elements which are present in the plan to achieve the mission and objective are listed below:

- Development of a sound and a dynamic teaching system based on the experience and vision gathered from world reviews, literature, innovations, proceedings, symposia etc. for the award of degrees.
- Designing and constantly updating the curricula involving core subjects, elective subjects, specialized areas, internship programs and study tours.
- Setting up of well-equipped specialized laboratories depending on the available resources.
- Implementation of research projects funded by the universities and other agencies.
- Development of linkages with national and international research organizations to foster research.
- The assessment of program objectives through different criteria is presented in Table 1

Table 1: Programs Objectives Assessment

S #	Objective	How Measured	When Measured	Improvement Identified	Improvement Made
1	Development of a sound and a dynamic teaching system.	Through quizzes, assignments and exams	It is a regular process as per requisite	Latest courses should be introduced in the curriculum	Students have an idea of theoretical and computer system concepts.
2	Designing and updating the curriculum	Courses related to the field are introduced	It is a continuous process and especially before the start of the project.	Specialized courses are recommended.	Topics of specialization of certain concepts are included in an outline of the course.

3	Well-equipped specialized laboratories	Projects are given during the semester in a team.	During the semester and during the final year project.	Students need to learn to work at different levels in the team.	Work assigned to students in a team and also to complete work in time by each team member effectively.
4	Implementation of research projects	Quizzes, exams, presentation	It's a continuous process.	To make Presentations and reports	Presentations, seminars, communication skills development
5	Linkage with national and international research organizations	Asking students to produce new ideas to apply existing technologies.	Continuous activity	Classical courses in addition to latest technologies should be introduced	Course outline updated for development related courses.
6	Assessment of program objectives	During the last year of degree program.	Asking students to prepare the research survey/review related to a particular field.	Latest topics should be included in specialized courses.	The course outlines are updated to accommodate the latest concepts.

Program Learning Outcomes:

At the successful completion of BSSE degree, the students will be equipped with the following

- Have a theoretical knowledge and competence in the fundamental areas of Computer Science
- Have a breadth of knowledge in a choice of application areas in Computer Science, including databases, algorithms and computability, networks, artificial intelligence, graphics, information security.

- Be able to design and develop software systems, computer systems and algorithm approaches
- Be able to communicate effectively with a range of audiences; shall demonstrate effective oral and written communication skills while disseminating technical information about computing technology and its applications.
- Be able to analyze a problem and define the computing requirements appropriate to its solution.
- Produce research artifacts such as papers, thesis prototype systems, integrating the knowledge obtained throughout the program.

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

Table 2: Program Outcomes and Their Relationship with Objectives

		Program Outcomes					
		1	**2**	**3**	**4**	**5**	**6**
Program Objectives	**1**	+++	++	+++	++	++	++
	2	++	+++	+++	+	+++	++
	3	++	+	++	++	+++	++
	4	++	++	++	+++	+	++
	5	++	++	+++	+++	+++	++
	6	++	++	++	++	++	+++

\+ = Moderately Satisfactory

++ = Satisfactory

+++ = Highly Satisfactory

Program Assessment Results

This section contains the Teacher Assessment and Student Course Evaluation in summarizing form.

Teacher Evaluation

There are more than Fourteen faculty members in the institute, but not all of them are involved in teaching courses in BSSE program. The teachers who teach courses in the BSSE degree program, their summarized result is given in the graph 1 below. Ms Aiasha Shafiq scored 74%, Ms Dania Saleem Malik scored 78%, Ms Sidra Tahir has scored 98%, Mr Bushra Hamid scored 86% , Ms. Iram Ilyas has scored 87%, Ms Rubina Ghazal scored 91%, Ms Sarfraz Bibi scored 72%, Mr Muhammad Ahsan Arshad scored 79% , Ms Muniba Batool scored 85%, Ms Sadia Naseem scored 73%, Ms Humaira Naz scored 92%, Mr. Ehtasham Azhar has scored 71%, Ms Sadaf Hamid scored 85%, Mr Asif Nawaz scored 91%, Mr Saif Ur Rehman scored 93%, Mr Tariq Ali scored 79%, Mr Saqib Majeed scored 85%, Mr. Kashif Sattar scored 94%, Mr Saleem Iqbal scored 89%. The comparison of their score is given below.

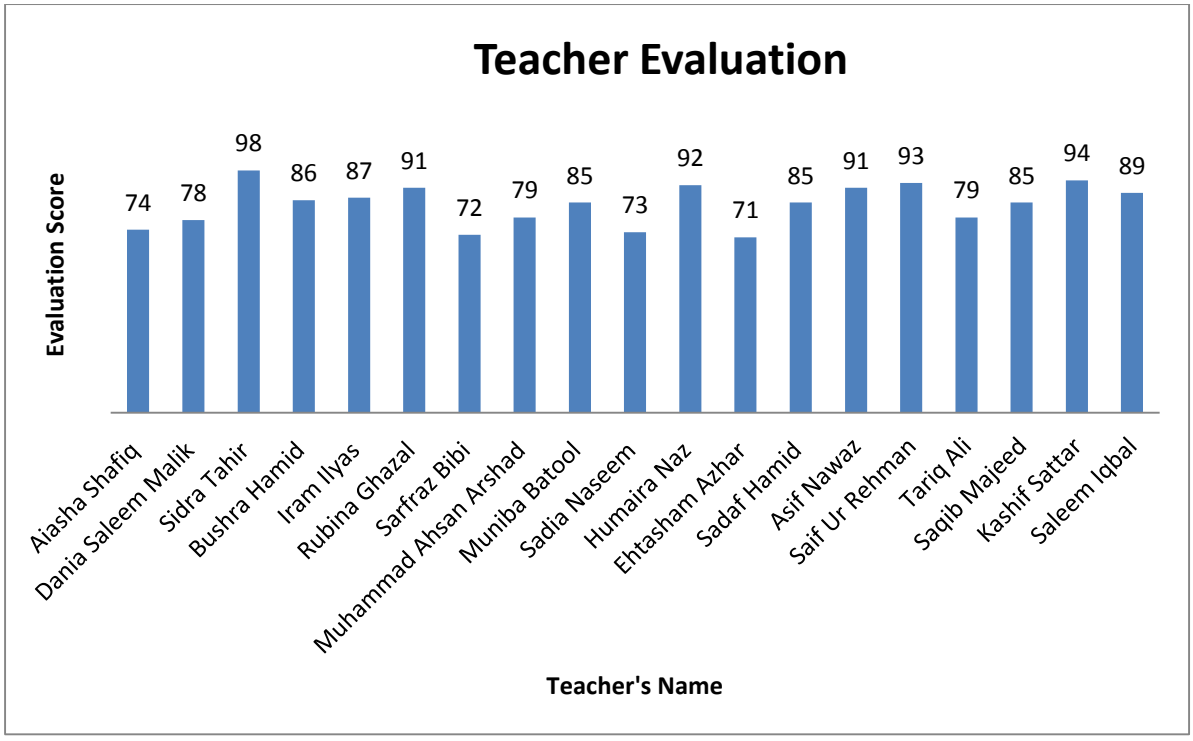
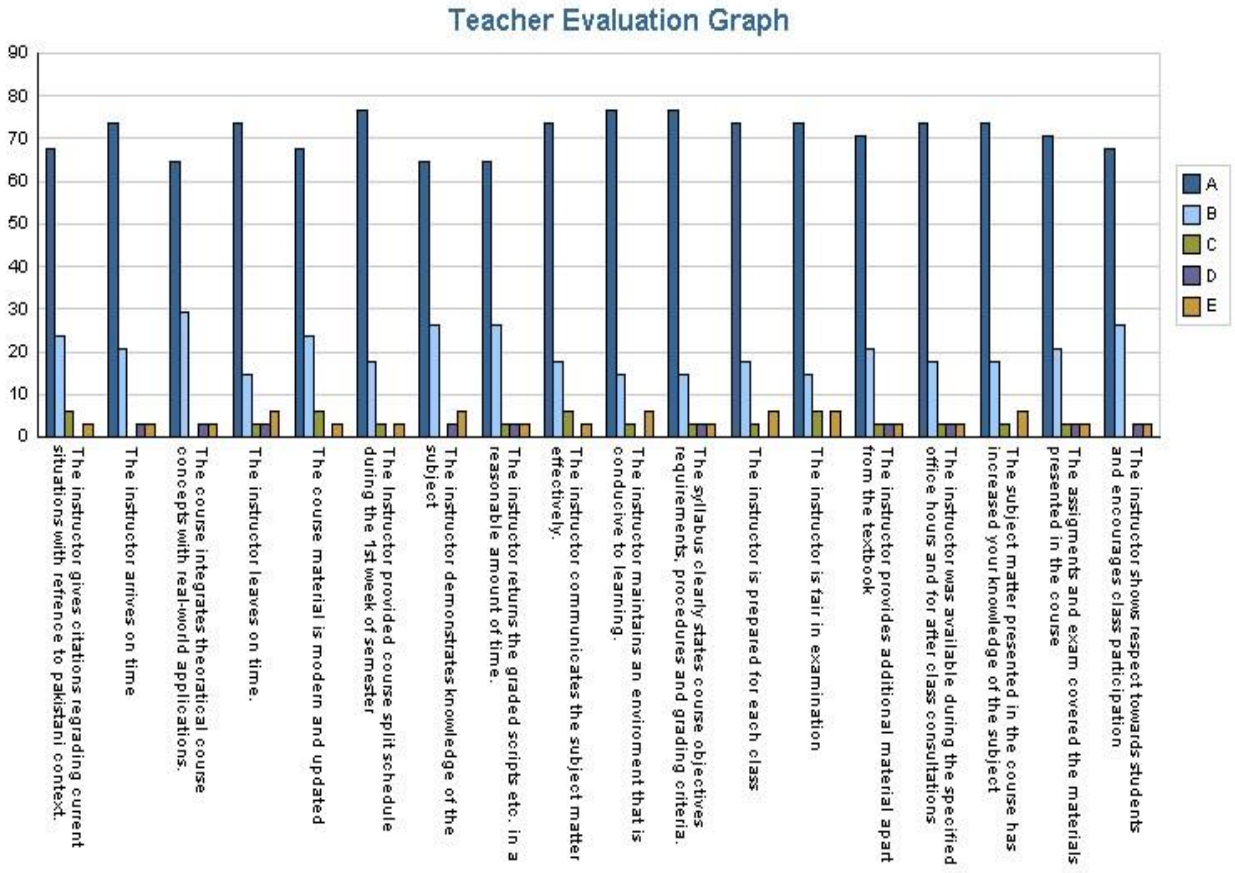


Figure 1: Teacher Evaluation Graph

Aiasha Shafiq (English Comprehension)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 0% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 100% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 50% are strongly agreed, 50% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about this Teacher:

Strengths:

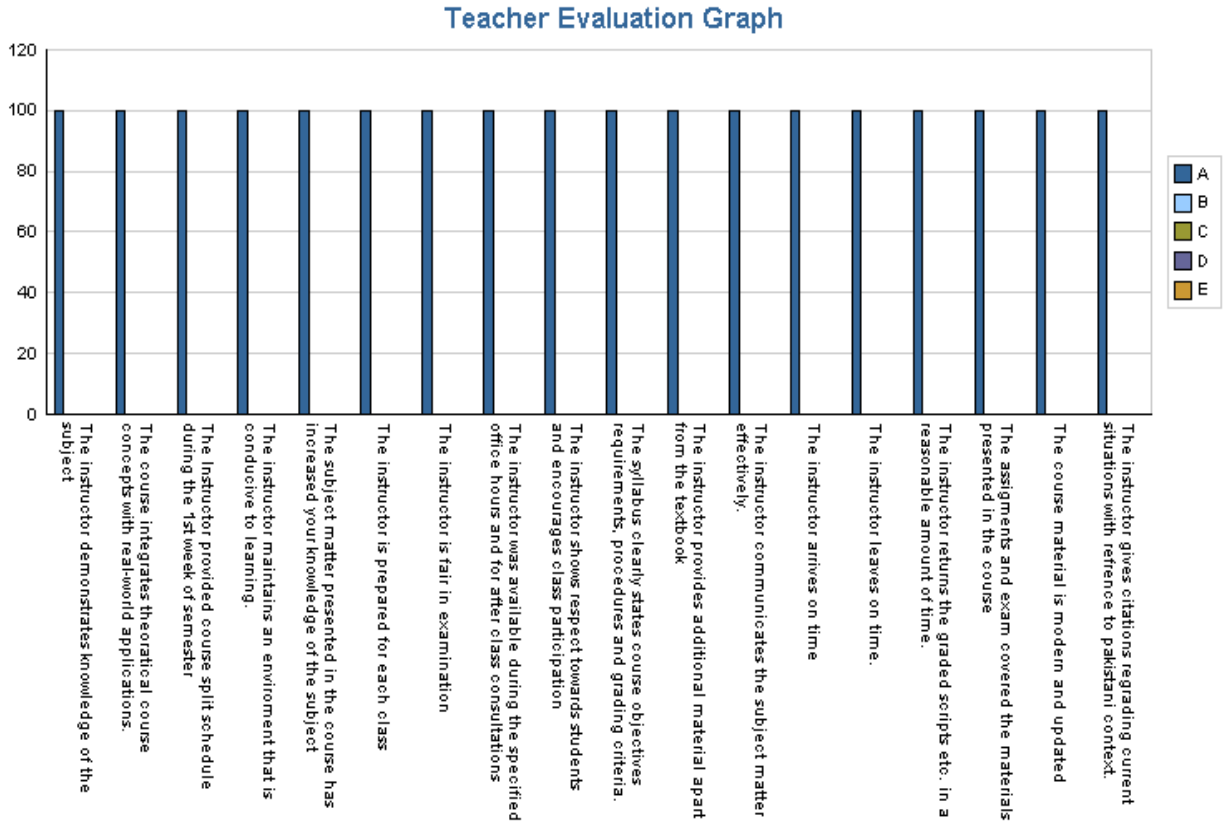
- The teacher is well prepared
- The teacher maintains a good environment.
- Teacher provides additional material

Weaknesses:

- Course needs to be updated
- The delivery of lectures needs to be improved

Dania Saleem Malik (Linear Algebra)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about these Teacher

Strengths:

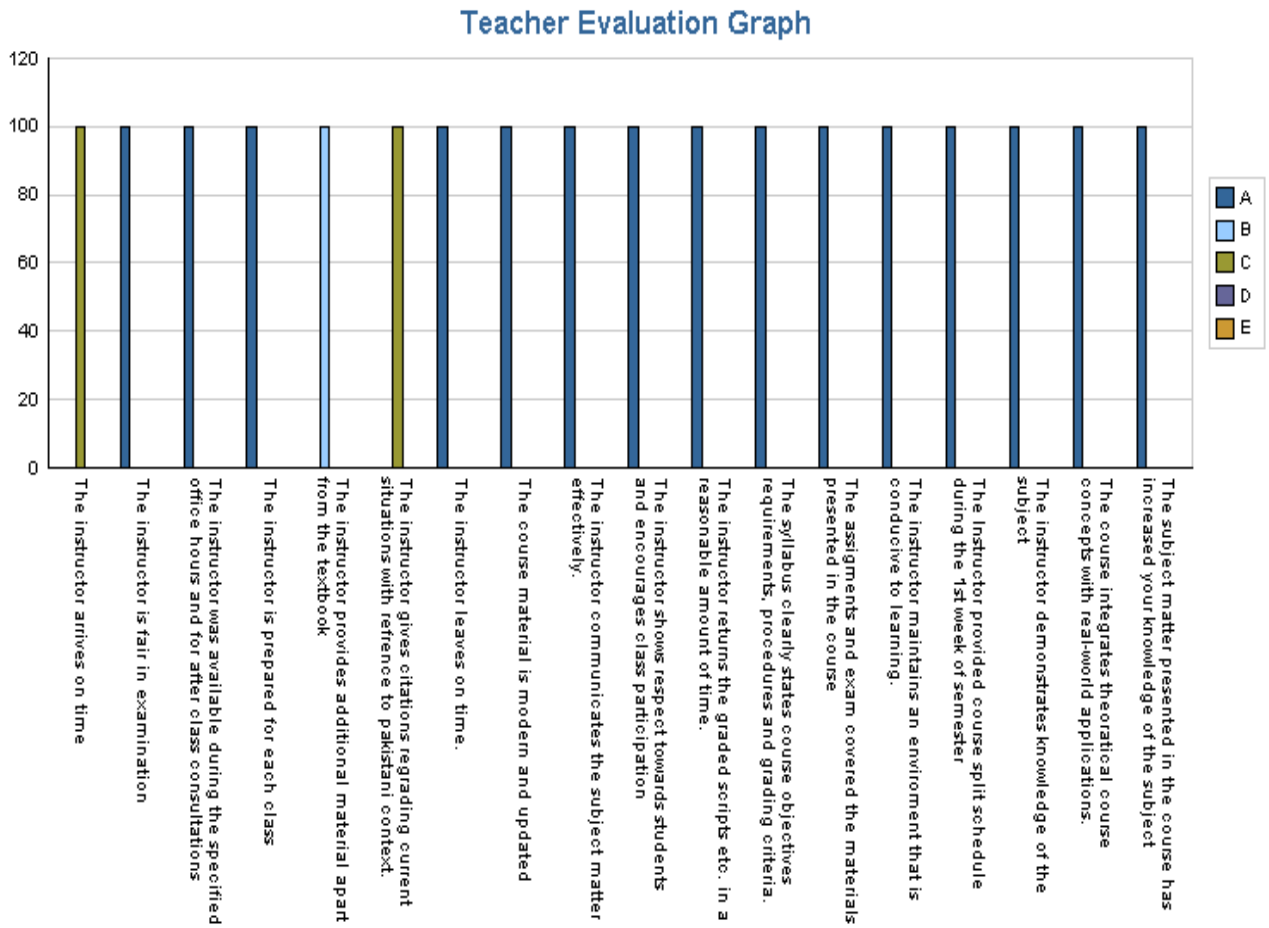
- The teacher is very punctual in classes.
- The teacher is fair in examinations.
- The teacher is well prepared for the lecture.
- The teacher has good communication skills.

Weaknesses:

- The teacher should be available to students for extra help.
- Course material should be more updated.

Sidra Tahir (Programming Fundamentals)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher:

Strength:

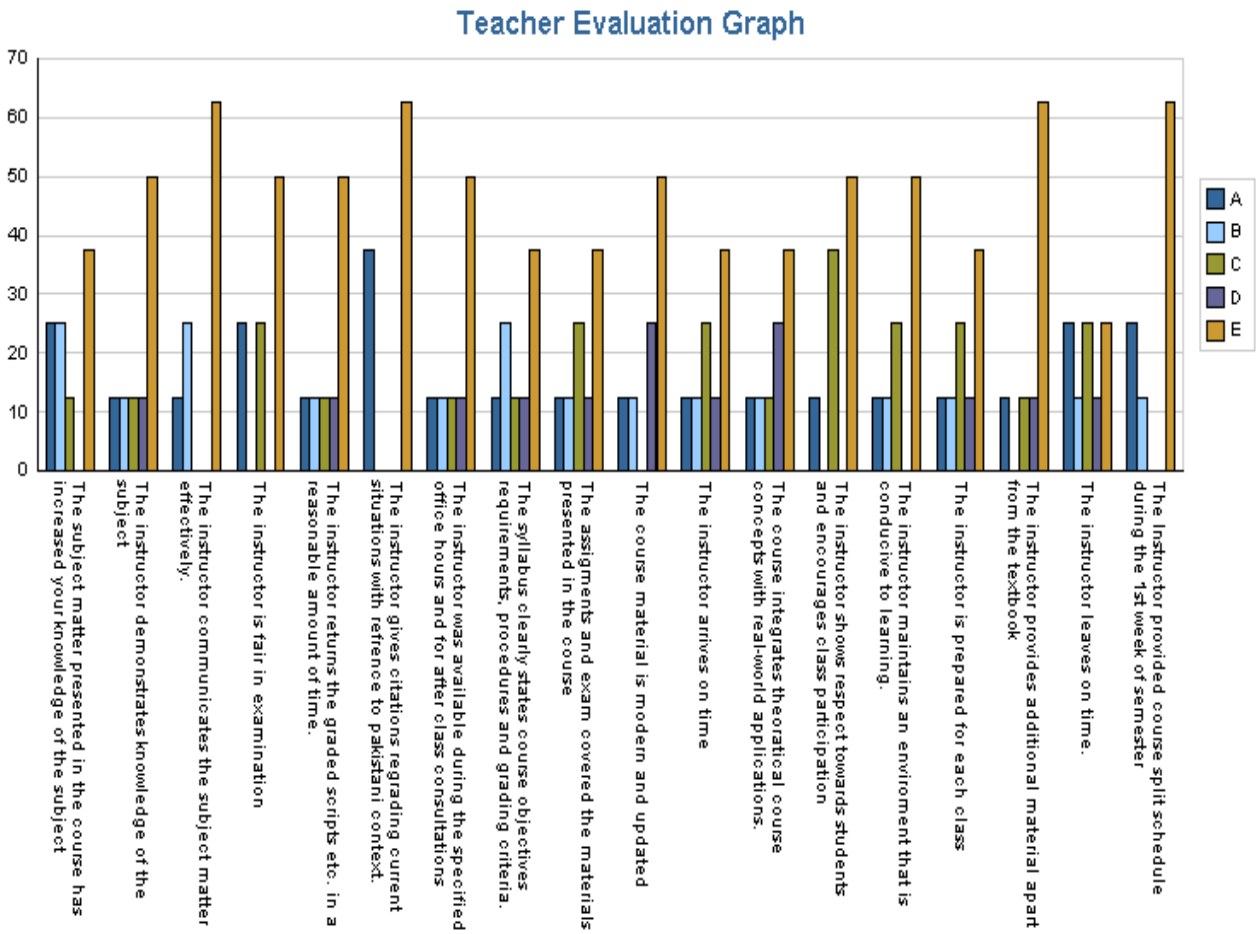
- Course material available
- Course objectives clear
- Good knowledge of the subject

Weakness:

- Should provide course outline.
- Assignments and quizzes should cover the course
- Teacher needs to be more punctual

Sidra Tahir (Introduction to Information & Communication Technologies)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 25% are strongly agreed, 13% are agreed, 0% are uncertain, 0% are Disagreed and 62% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 13% are strongly agreed, 13% are agreed, 13% are uncertain, 24% are Disagreed and 37% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 12% are strongly agreed, 12% are agreed, 13% are uncertain, 13% are Disagreed and 50% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 12% are strongly agreed, 12% are agreed, 26% are uncertain, 0% are Disagreed and 50% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 12% are strongly agreed, 13% are agreed, 13% are uncertain, 12% are Disagreed and 50% are strongly disagreed.



General Comments of the Students about the Teacher:

Strength:

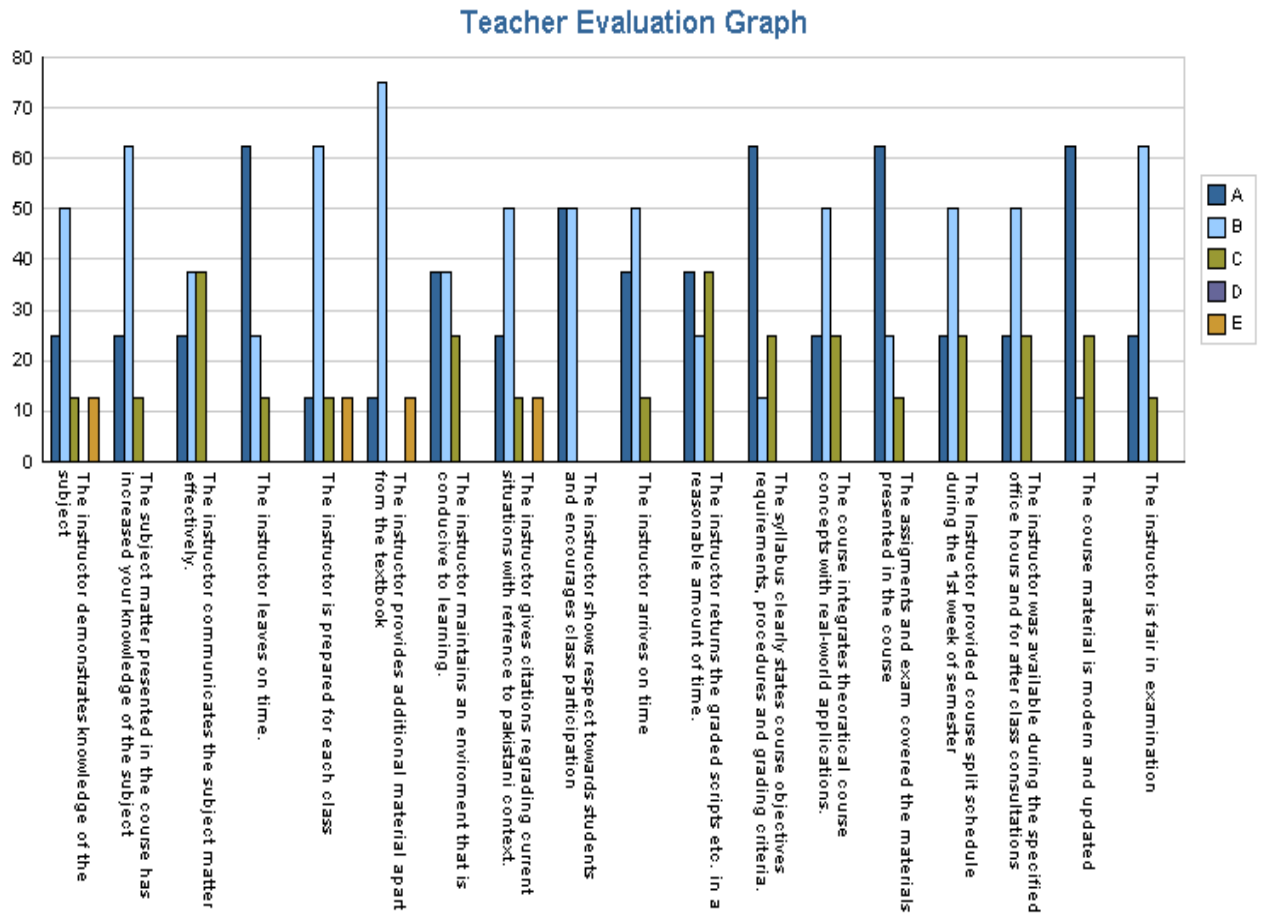
- Good environment of the class
- Gives citations regarding current situations
- Good knowledge of the subject
- Prepared for each class

Weakness:

- Should provide course outline in first week.

Bushra Hamid (Programming Fundamentals)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 25% are strongly agreed, 50% are agreed, 25% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 25% are strongly agreed, 50% are agreed, 25% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 26% are strongly agreed, 50% are agreed, 12% are uncertain, 0% are Disagreed and 12% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 38% are strongly agreed, 38% are agreed, 24% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 25% are strongly agreed, 50% are agreed, 25% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher:

Strength:

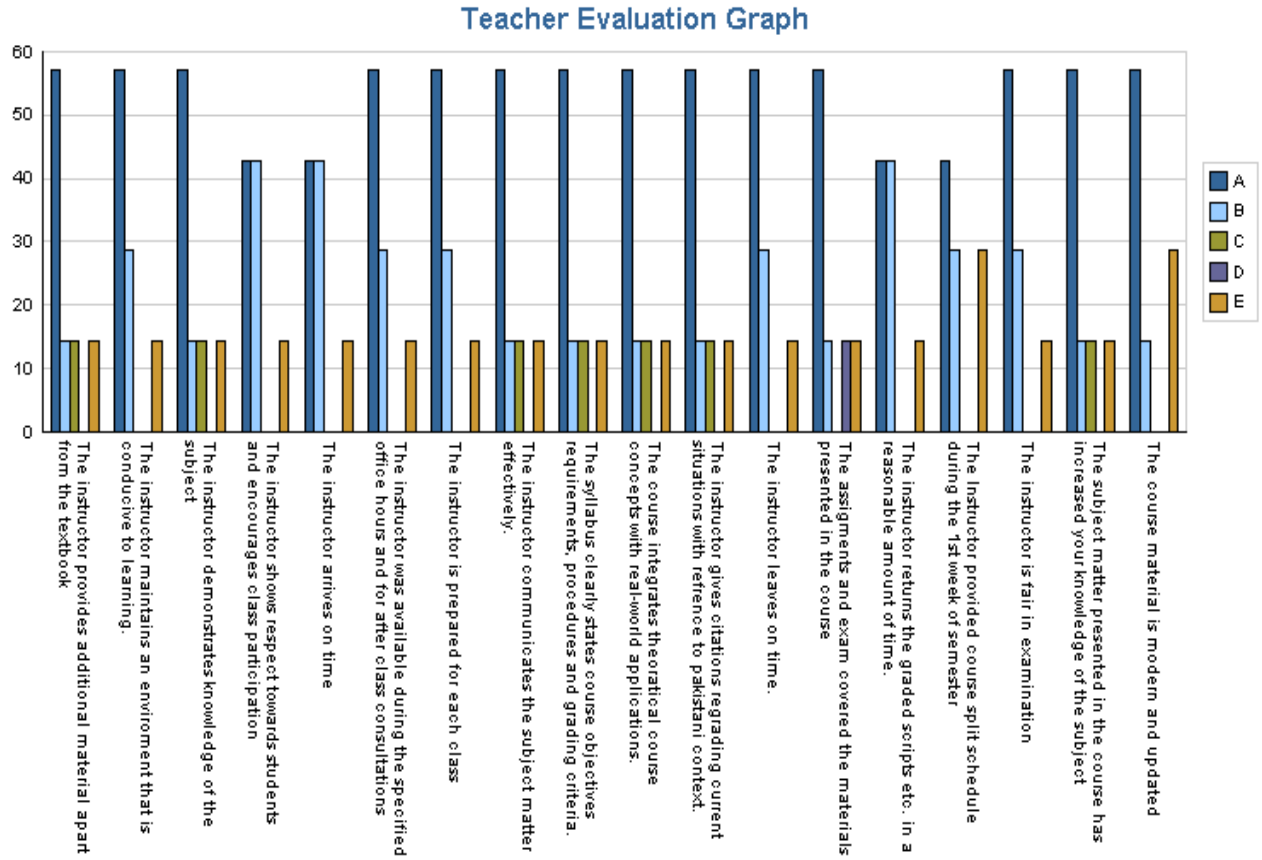
- Subject matter well presented
- Available in the specified office hours

Weakness:

- Should provide additional material
- Should give citations regarding current situations

Iram Ilyas (Object Oriented Programming)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 42% are strongly agreed, 29% are agreed, 29% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 55% are strongly agreed, 15% are agreed, 15% are uncertain, 0% are Disagreed and 15% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 55% are strongly agreed, 15% are agreed, 15% are uncertain, 0% are Disagreed and 15% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 57% are strongly agreed, 29% are agreed, 0% are uncertain, 0% are Disagreed and 14% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 57% are strongly agreed, 29% are agreed, 0% are uncertain, 0% are Disagreed and 14% are strongly disagreed.



General Comments of the Students about the Teacher:

Strength:

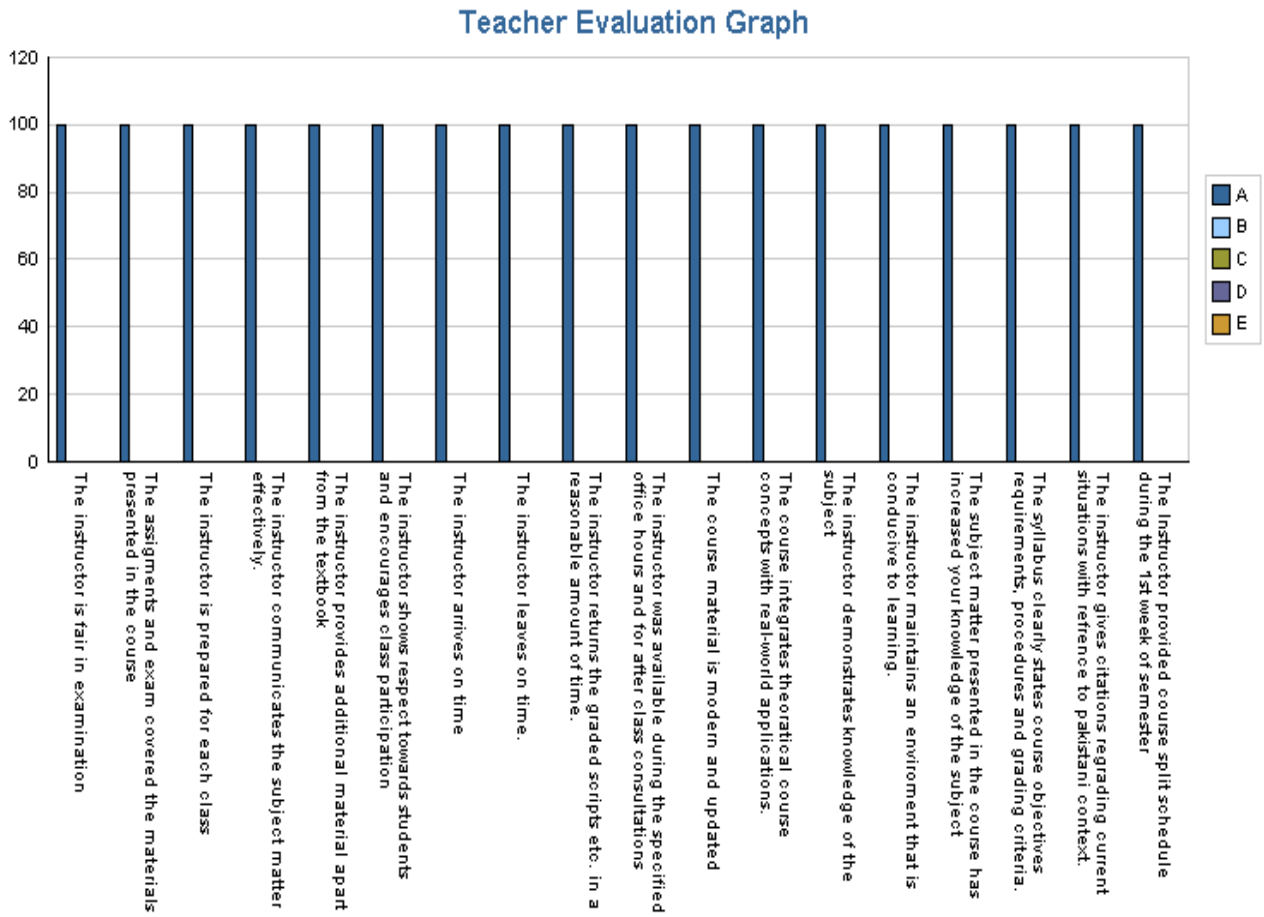
- Course material is modern and updated
- Provides course split in first week
- Good knowledge about the course

Weakness:

- Should provide additional material

Rubina Ghazal (Object Oriented Programming)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher

Strength:

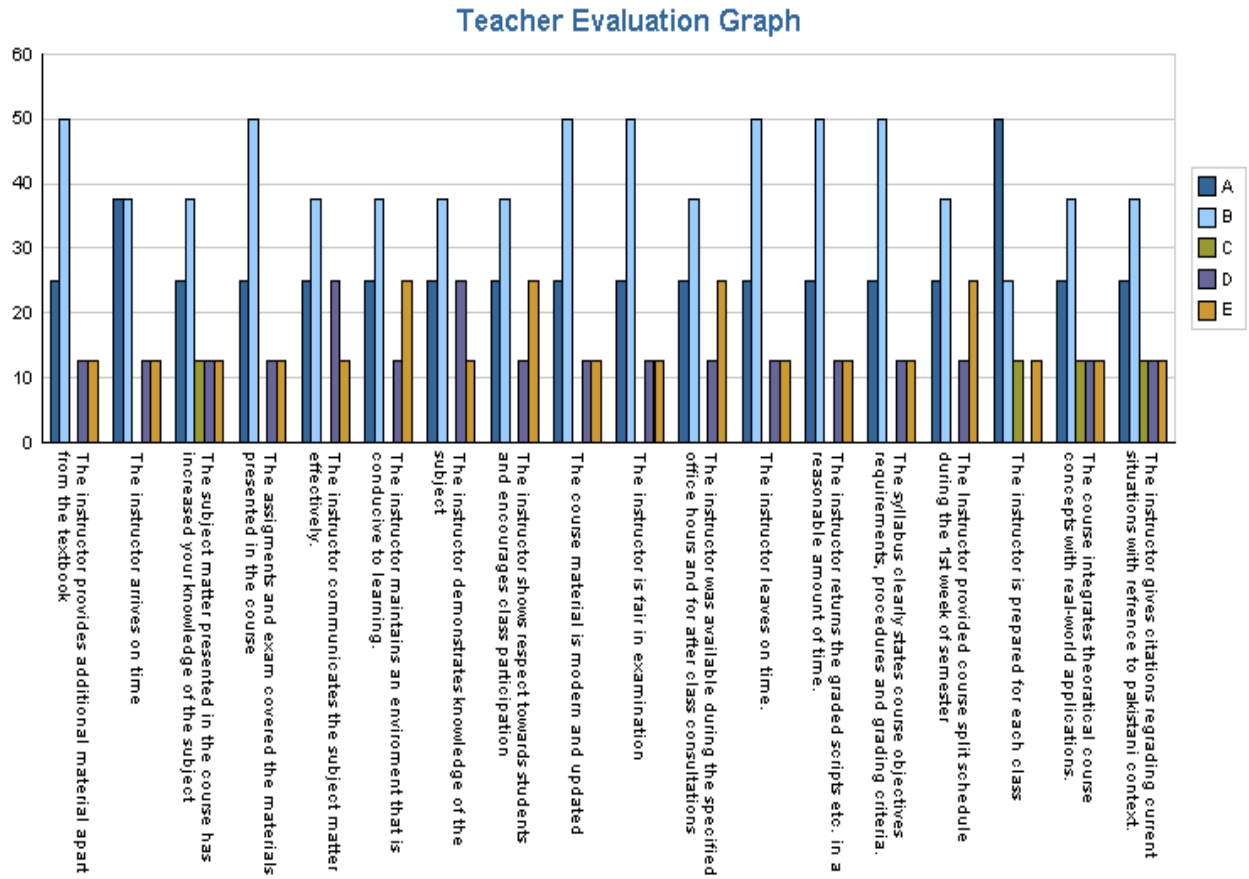
- Well prepared
- Punctual
- Fair in examinations

Weakness:

- Assignment and Quizzes should cover the whole course

Sarfraz Bibi (Software Engineering)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 25% are strongly agreed, 37% are agreed, 0% are uncertain, 13% are Disagreed and 25% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 25% are strongly agreed, 36% are agreed, 39% are uncertain, 39% are Disagreed and 39% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 25% are strongly agreed, 38% are agreed, 0% are uncertain, 25% are Disagreed and 12% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 25% are strongly agreed, 38% are agreed, 0% are uncertain, 12% are Disagreed and 25% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 25% are strongly agreed, 38% are agreed, 0% are uncertain, 12% are Disagreed and 25% are strongly disagreed.



General Comments of the Students about the Teacher

Strength:

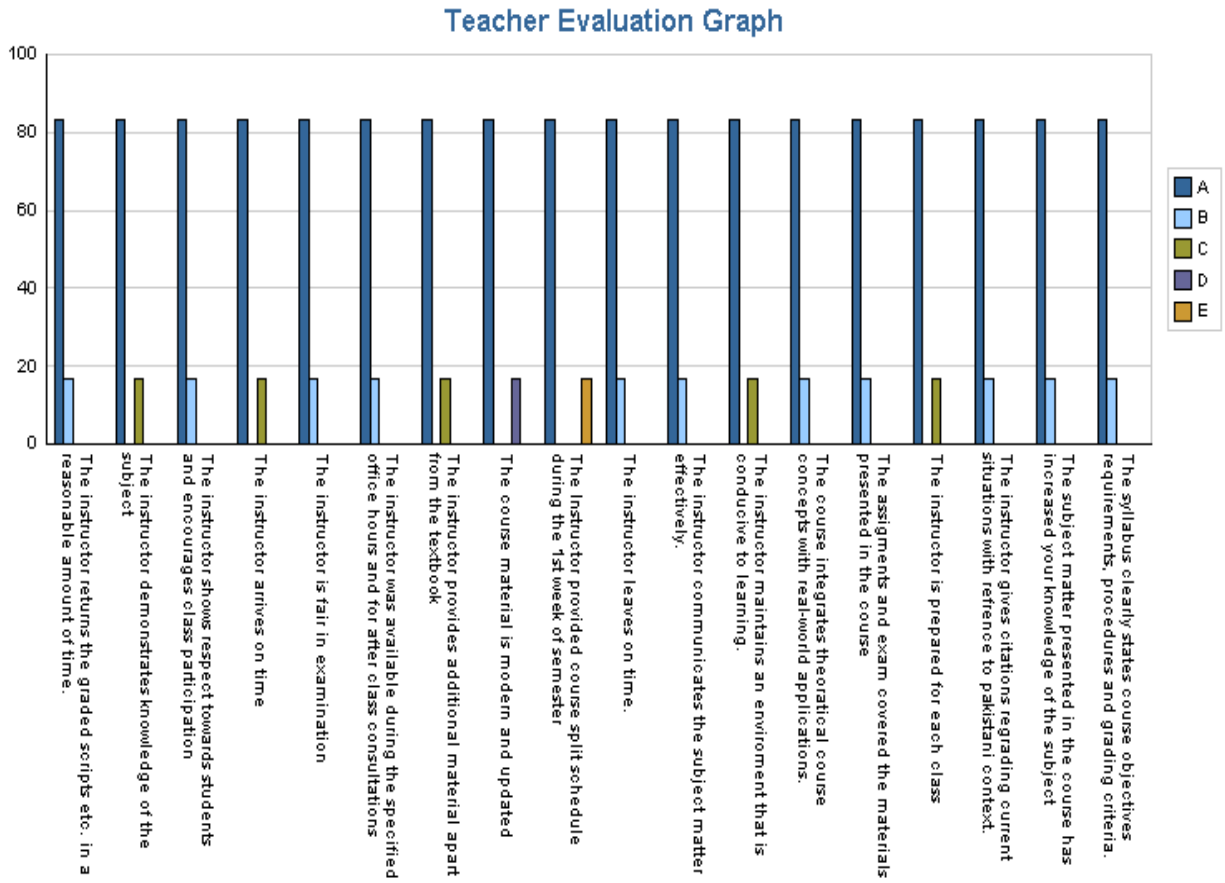
- Comprehensive course material
- Provide course outline
- Return graded sheets on time

Weakness:

- The instructor must show respect towards students
- Communication skills are not good
- Teacher is not very punctual

Muhammad Ahsan Arshad (Basic Electronics)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 82% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 18% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 82% are strongly agreed, 18% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 82% are strongly agreed, 0% are agreed, 18% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 82% are strongly agreed, 0% are agreed, 18% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 82% are strongly agreed, 18% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher:

Strength:

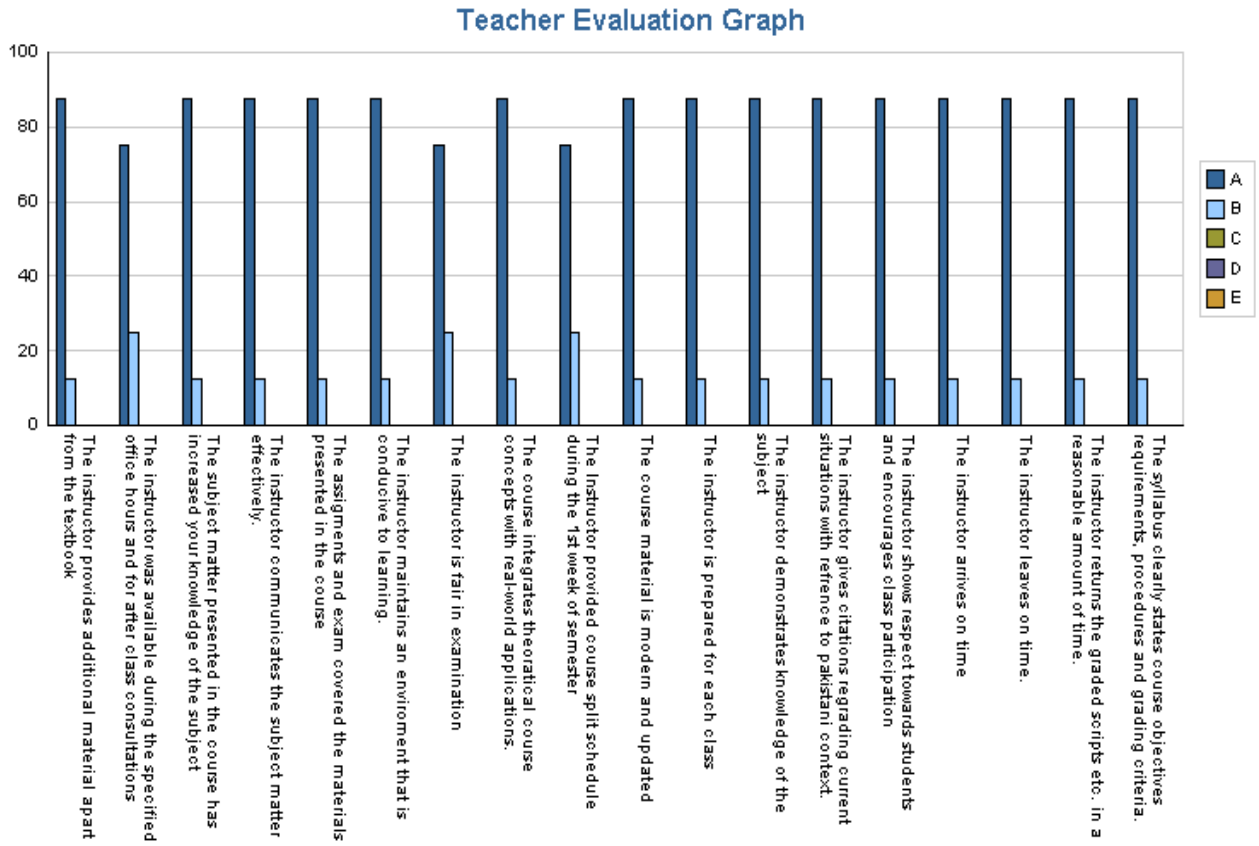
- Subject matter well presented
- Available in the specified office hours

Weakness:

- Should provide additional material
- Should give citations regarding current situations

Muniba Batool (Communication & Presentation Skills)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 78% are strongly agreed, 22% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 85% are strongly agreed, 15% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 85% are strongly agreed, 15% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 88% are strongly agreed, 12% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 78% are strongly agreed, 22% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher

Strength:

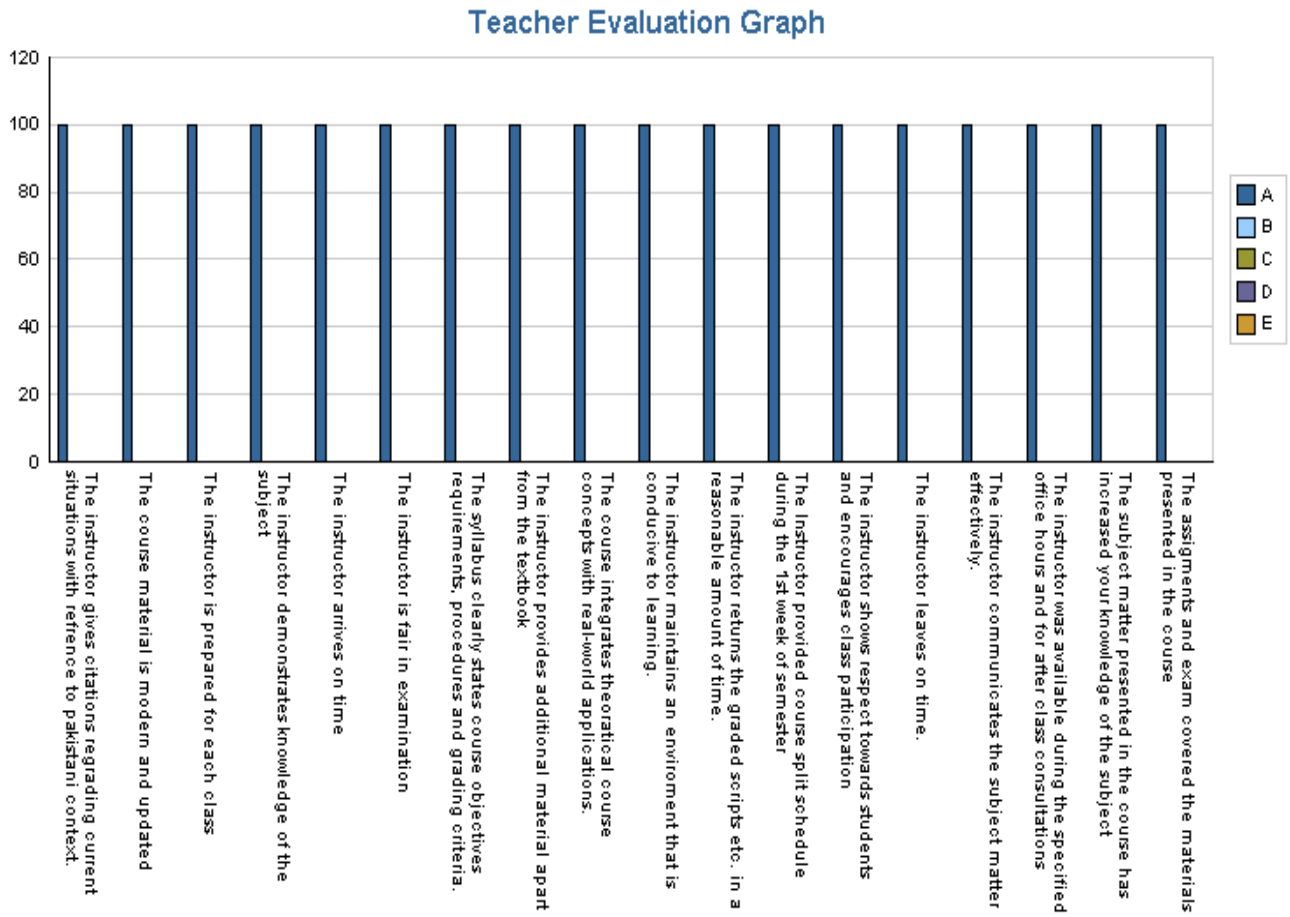
- Comprehensive course material
- Well Presented
- Good Teaching Method
- Take Quiz Weekly

Weakness:

- The teacher should provide extra material
- Must show respect to students

Sadia Naseem (Communication Skills)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about the Teacher

Strength:

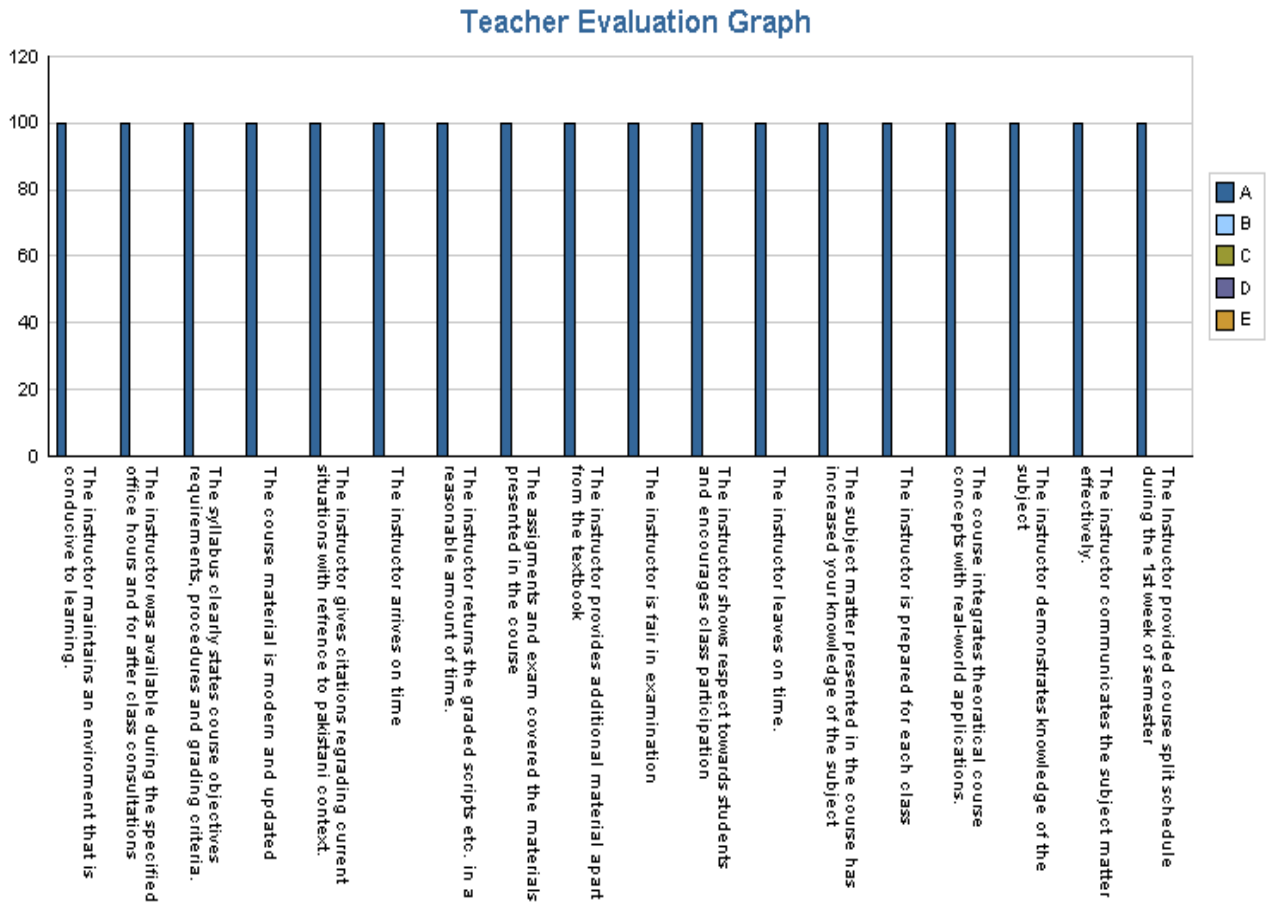
- The teacher is Punctual
- Good communication skills
- Provide additional material
- Nice teaching methodology

Weakness:

- The instructor should provide split schedule at the start of the semester
- The teacher needs to be more fair in examination
- The quizzes and assignments should be returned on time.

Humaira Naz (Financial Accounting)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about this Teacher:

Strengths:

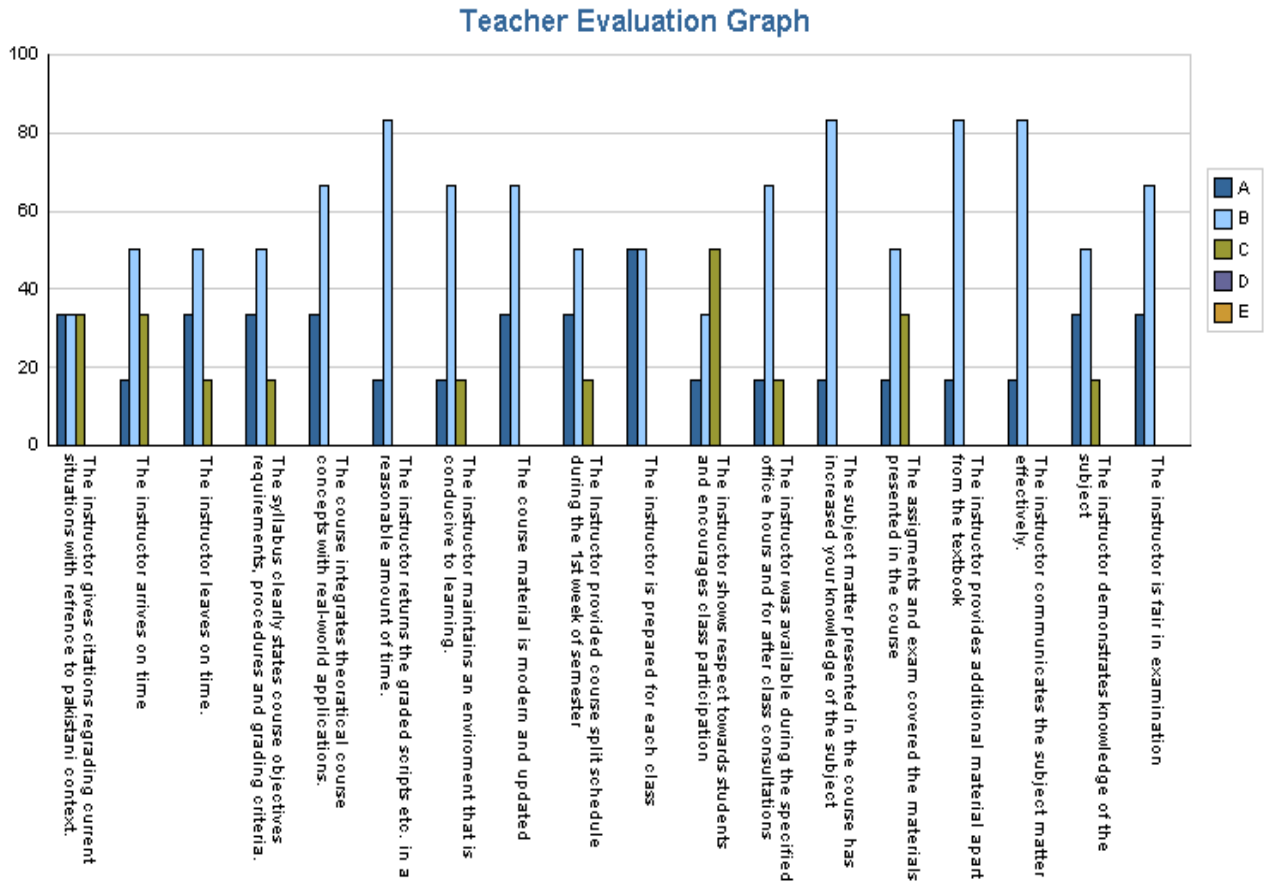
- The teacher is very punctual.
- The teacher is fair in examination and shows respect towards students.
- The teacher maintained good environment

Weaknesses:

- The teacher needs to be more prepared
- The teacher should provide extra material o the students.

Ehtasham Azhar (Calculus and Analytical Geometry)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 35% are strongly agreed, 50% are agreed, 15% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 30% are strongly agreed, 70% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 35% are strongly agreed, 50% are agreed, 15% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 15% are strongly agreed, 70% are agreed, 15% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 15% are strongly agreed, 70% are agreed, 15% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about this Teacher:

Strengths:

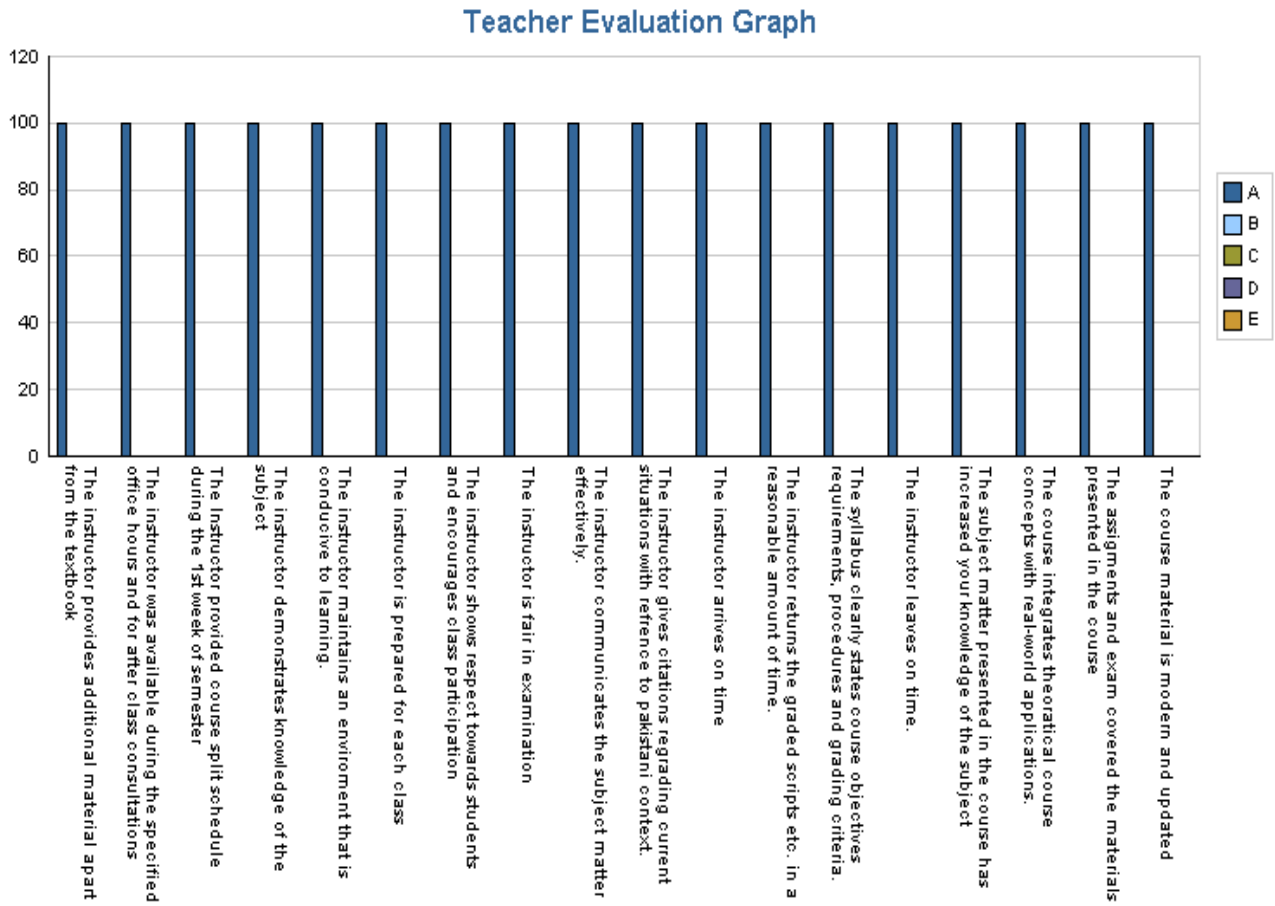
- The course is updated
- The teacher is well prepared for the class
- Good communication skills

Weaknesses:

- The teacher gives citation to the current environment
- Teacher should give time to the students after class for consultation.

Sadaf Hamid (Statistics and Probability)

The graph shows the detail of evaluation. The graph for "The Instructor provided course split schedule during the 1st week of semester'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The course integrates theoretical course concepts with real-world applications'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor demonstrates knowledge of the subject', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed'. The graph for "The instructor maintains an environment that is conducive to learning'', shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are Disagreed and 0% are strongly disagreed. The graph for "The instructor was available during the specified office hours and for after class consultations'', shows that 100% are strongly agreed, 0% are agreed, 10% are uncertain, 0% are Disagreed and 0% are strongly disagreed.



General Comments of the Students about this Teacher:

Strengths:

- The teacher encourages students' participation and gives respect to students.
- The teacher is punctual and fair in marking.

Weaknesses:

- The teacher should include modern concepts in her lectures to increase student knowledge.
- The teacher has not covered the syllabus completely.

Student Course Evaluation

The courses of the respective teachers were also evaluated as per Performa 1 (Annexure-1) and the results are shown in Fig-2. The teacher who taught the score English Comprehension (ENG-305) has score 80%, the teacher for Communication and Presentation Skills (ENG-325) has score 88%, the teacher for Human Computer Interaction (CS-685) has score 85%, the teacher for Calculus and Analytic Geometry (MTH-310) has score 92%, the teacher for Discrete Structures (CS-335) has score 93%, the teacher for Linear Algebra (MTH-435) has score 85%, the teacher for Introduction to Information & Communication Technologies (CS-300) has score 75%, the teacher for Programming Fundamentals (CS-323) has score 95%, the teacher for Object Oriented Programming (CS-423) has score 96%, the teacher for Software Engineering (CS-453) has score 90%, the teacher for Data Structure and Algorithms (CS-443) has score 82%, the teacher for Software Requirement Engineering (SE-454) has score 91 %, the teacher for Database Systems (CS-400) has score 87%, the teacher for Operating Systems (CS-583) has score 88%, the teacher for Software Design and Architecture (SE-440) has score 93%, the teacher for Statistics and Probability (STT-500) has score 79%. The scores of other courses of respective teachers can be seen from the graph.

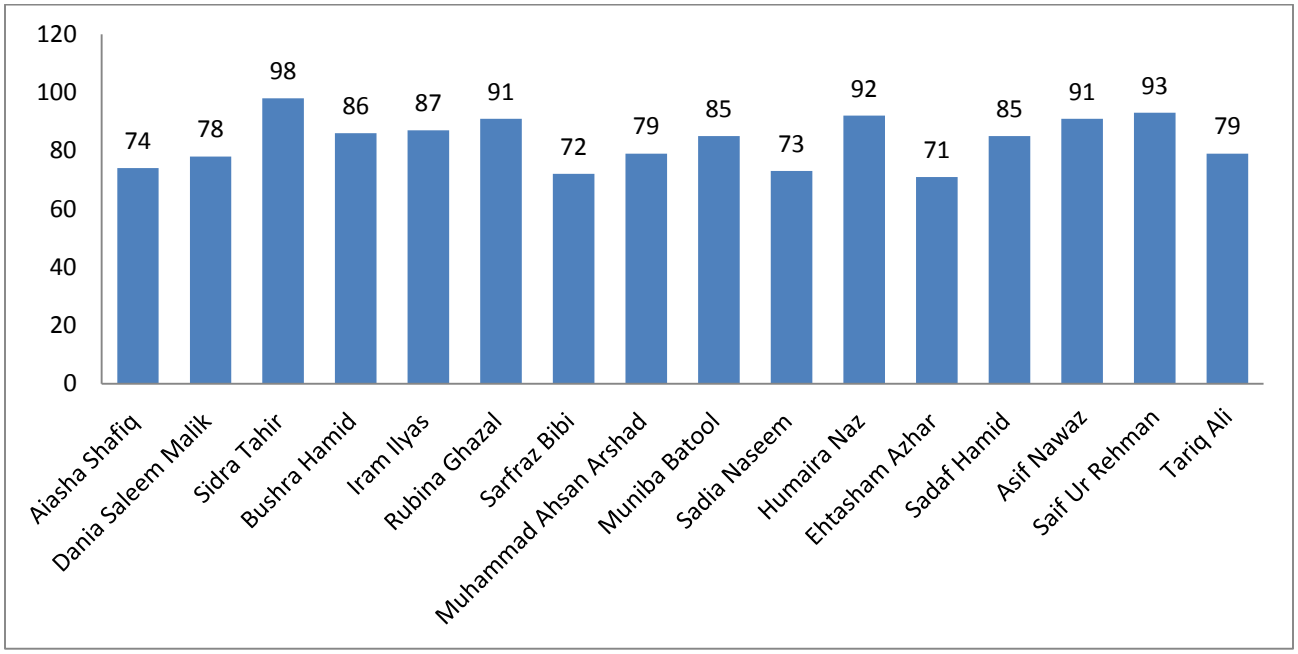
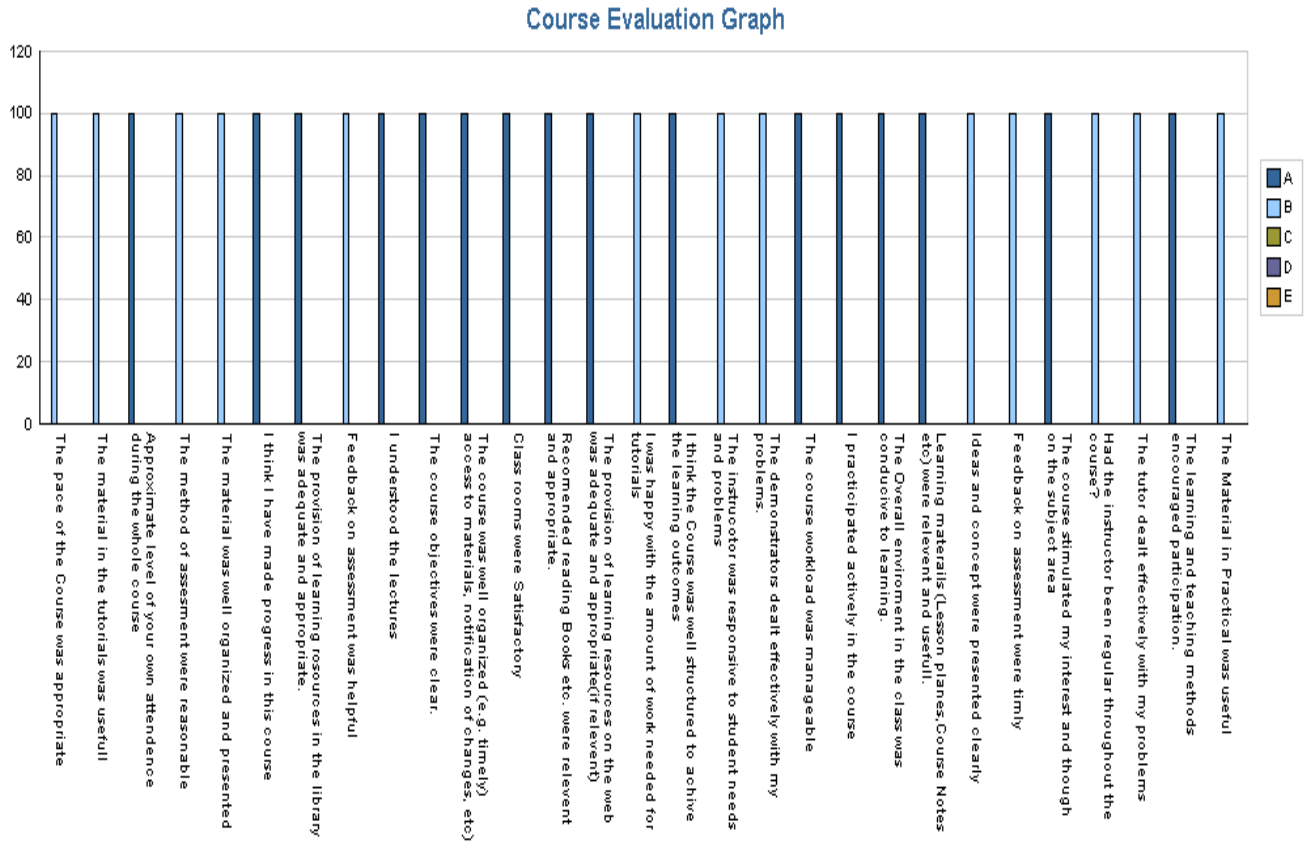


Figure 2: Student Course Evaluation Graph

Aisha Shafiq (English Comprehension)

The graph for "Had the instructor been regular throughout the course" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 0% are strongly agreed, 100% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 0% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

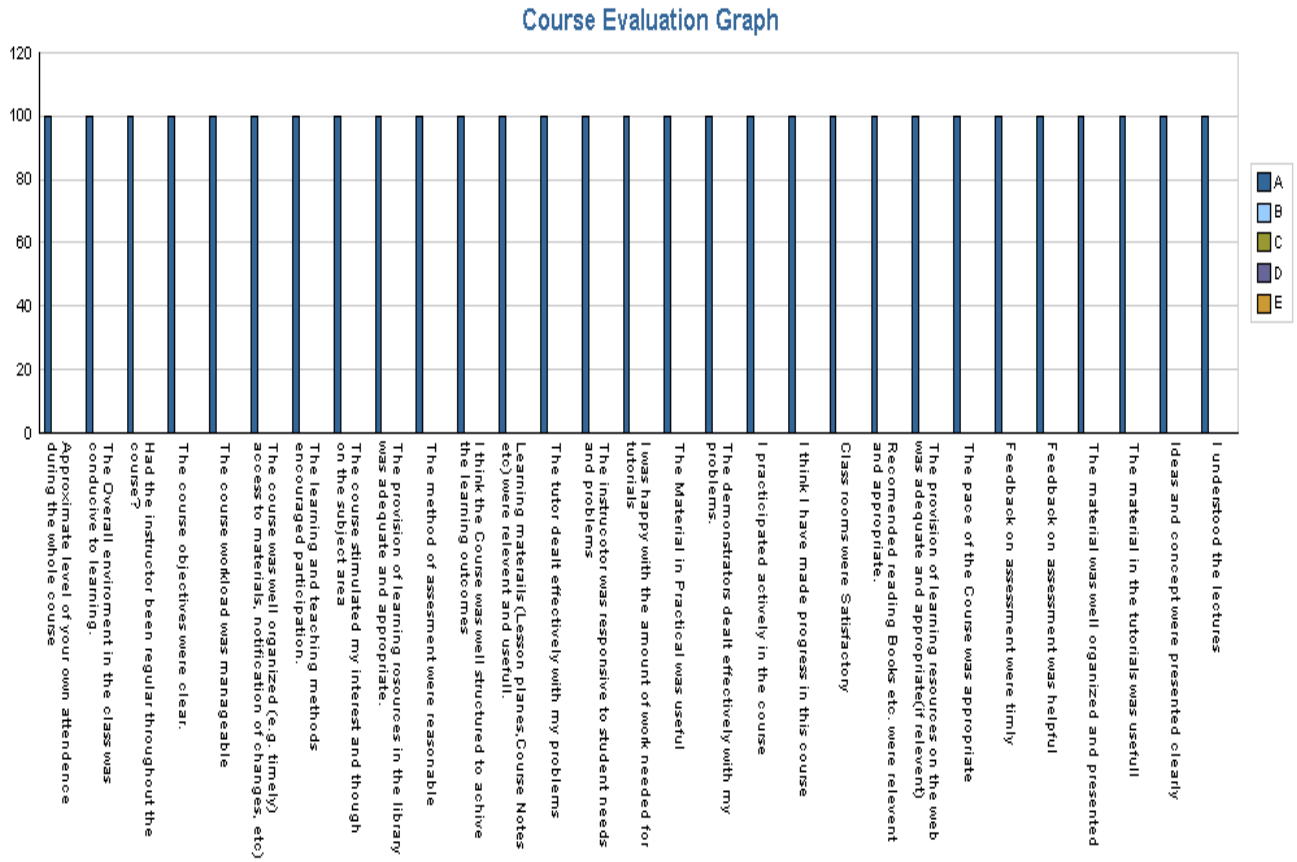
- Course objectives were clear
- Good communication with students
- Well organized material

Weaknesses:

- Tutorials should be added
- More practical material should be added

Muhammad Waseem (Introduction to Management)

The graph for "Had the instructor been regular throughout the course" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

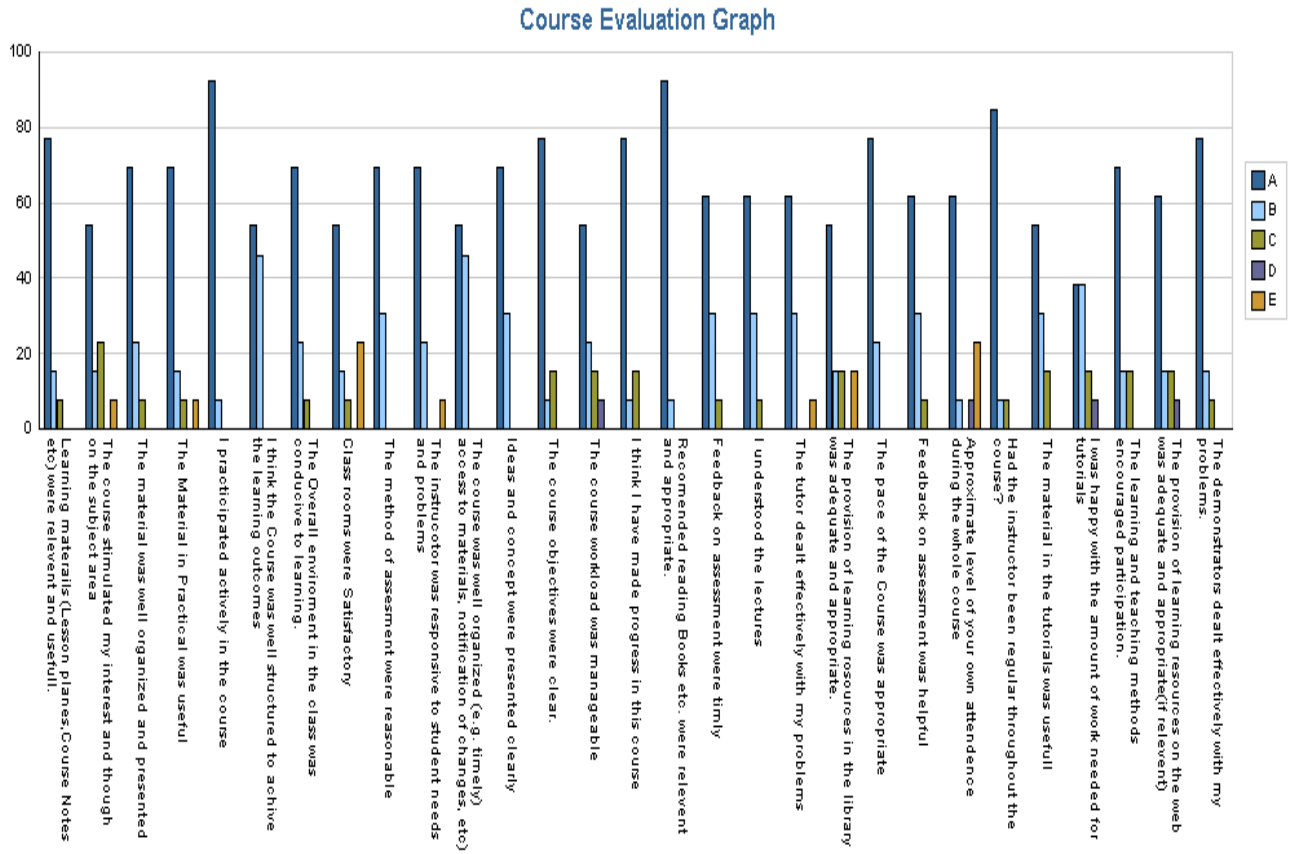
- Understanding of the course
- Good reference material was provided
- Course was well organized

Weaknesses:

- Feedback on assessment should be timely
- Student's interest should be developed

Sidra Tahir (Programming Fundamentals)

The graph for "Had the instructor been regular throughout the course" shows that 84% are strongly agreed, 8% are agreed, 8% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 35% are strongly agreed, 40% are agreed and 18% are uncertain 6% are disagreed and 1% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 55% are strongly agreed, 15% are agreed and 15% are uncertain 15% are disagreed and 15% are strongly disagreed. The graph for "The course objectives were clear" shows that 78% are strongly agreed, 7% are agreed, 15% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 56% are strongly agreed, 24% are agreed, 17% are uncertain, 3% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 70% are strongly agreed, 22% are agreed, 0% are uncertain and 8% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

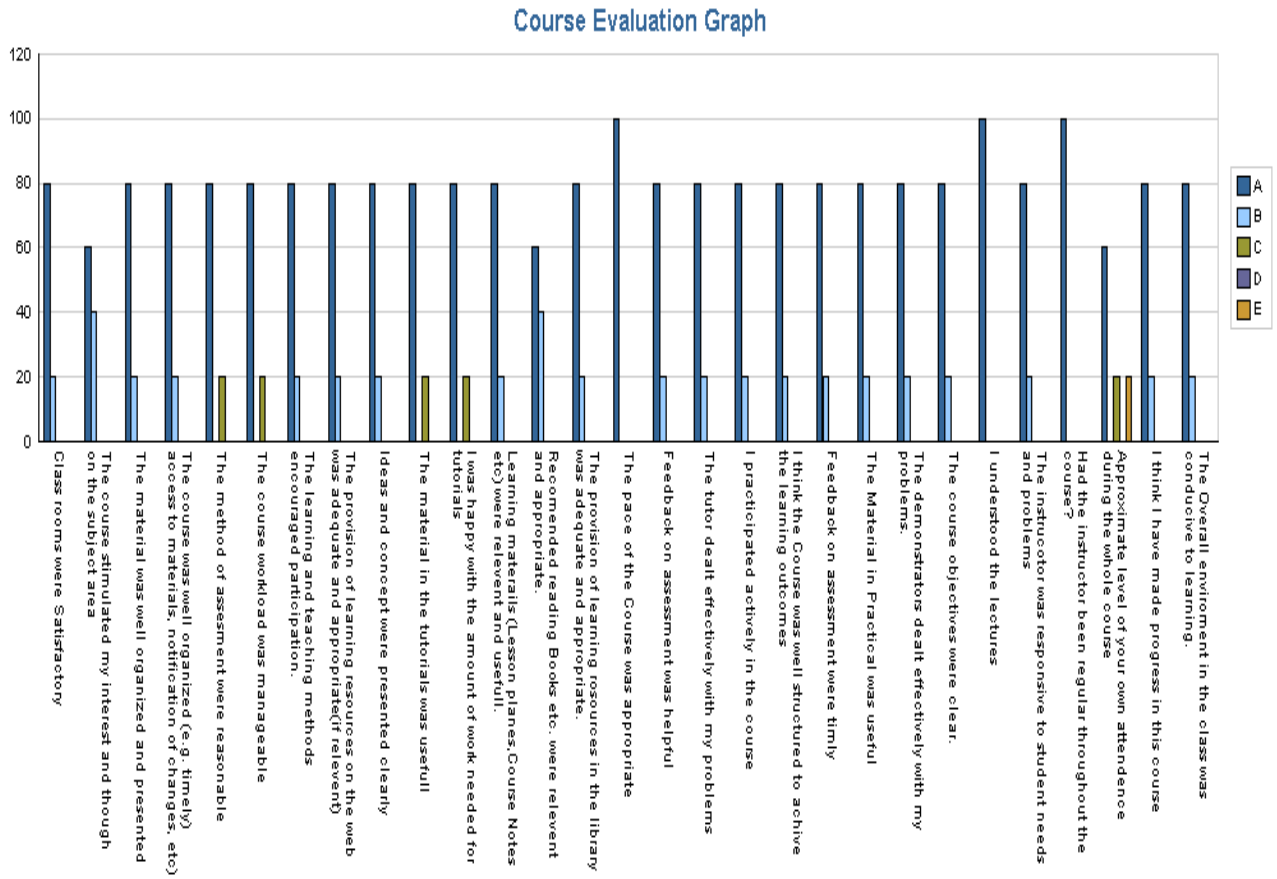
- Understanding of the course
- Clear Objectives
- Well organized material

Weaknesses:

- More practical material should be added

Dania Saleem Malik (Linear Algebra)

The graph for "Had the instructor been regular throughout the course" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 80% are strongly agreed, 20% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 80% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 80% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 80% are strongly agreed, 0% are agreed, 20% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 80% are strongly agreed, 20% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

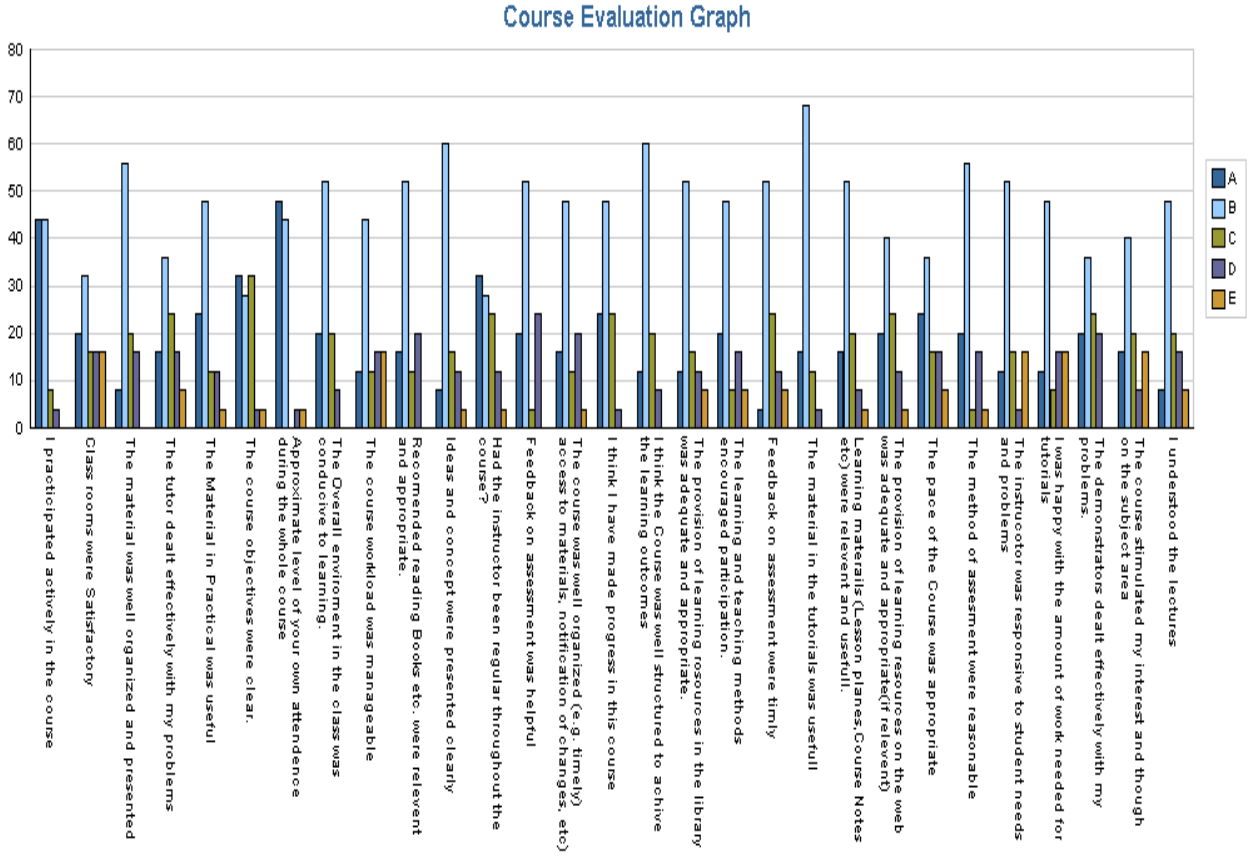
- Objectives well clear
- Reference material provided
- Well organized material

Weaknesses:

- The demonstration should be more effective

Sidra Tahir (Introduction to Information & Communication Technologies)

The graph for "Had the instructor been regular throughout the course" shows that 32% are strongly agreed, 28% are agreed, 25% are uncertain, 12% are disagreed and 3% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 12% are strongly agreed, 60% are agreed and 20% are uncertain 8% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 12% are strongly agreed, 52% are agreed and 15% are uncertain 12% are disagreed and 9% are strongly disagreed. The graph for "The course objectives were clear" shows that 32% are strongly agreed, 28% are agreed, 32% are uncertain, 4% are disagreed and 4% are strongly disagreed. The graph for "The Course workload was manageable" shows that 12% are strongly agreed, 46% are agreed, 12% are uncertain, 15% are disagreed and 15% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 12% are strongly agreed, 52% are agreed, 16% are uncertain and 4% are disagreed and 16% are strongly disagreed.



General Comments of Students about this course:

Strengths:

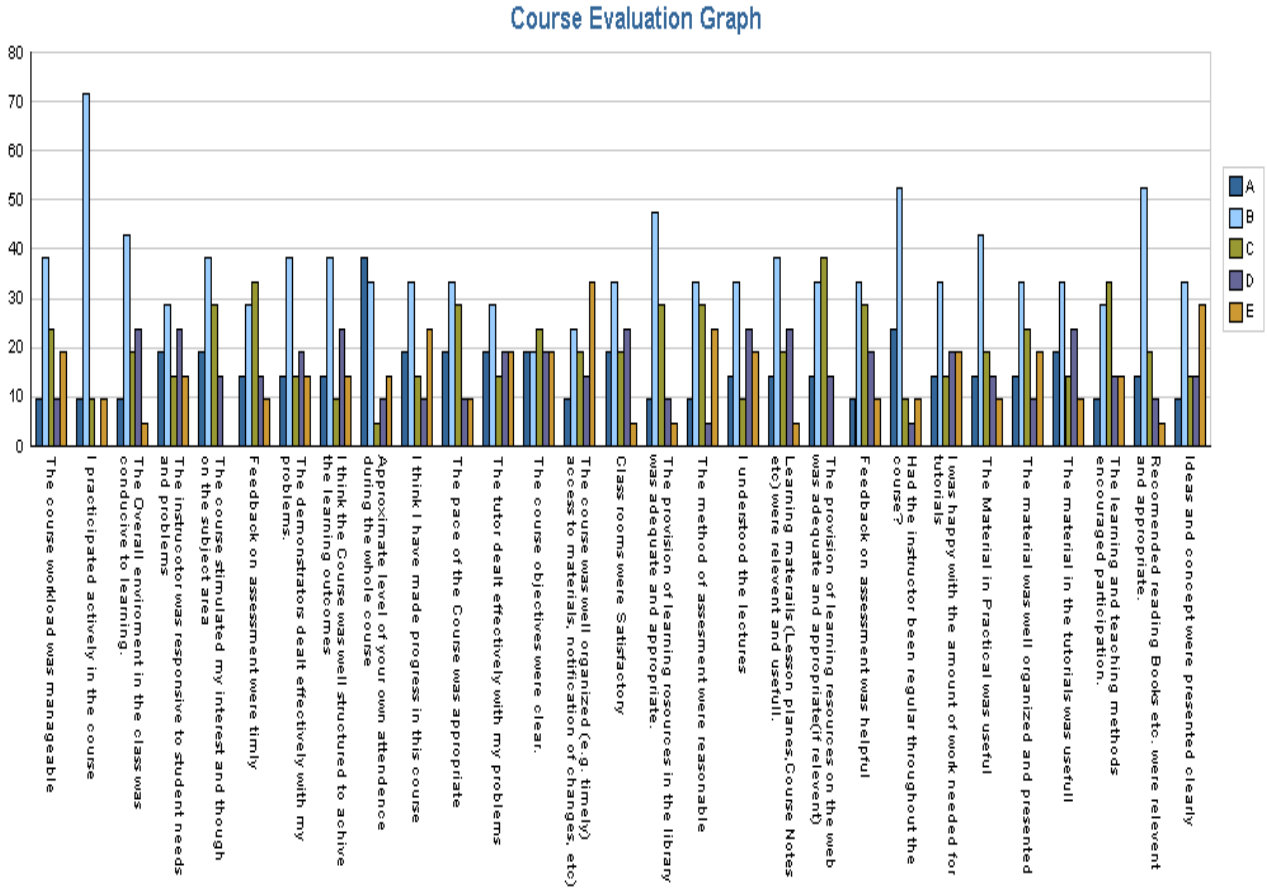
- Taught well
- Well organized material
- Effective teaching method

Weaknesses:

- More practical material needed
- More reference material needed

Bushra Hamid (Programming Fundamentals)

The graph for "Had the instructor been regular throughout the course" shows that 23% are strongly agreed, 52% are agreed, 10% are uncertain, 5% are disagreed and 10% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 15% are strongly agreed, 38% are agreed and 10% are uncertain 23% are disagreed and 14% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 10% are strongly agreed, 47% are agreed and 29% are uncertain 10% are disagreed and 4% are strongly disagreed. The graph for "The course objectives were clear" shows that 19% are strongly agreed, 19% are agreed, 24% are uncertain, 19% are disagreed and 19% are strongly disagreed. The graph for "The Course workload was manageable" shows that 10% are strongly agreed, 38% are agreed, 23% are uncertain, 10% are disagreed and 19% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 19% are strongly agreed, 29% are agreed, 15% are uncertain and 22% are disagreed and 15% are strongly disagreed.



General Comments of Students about this course:

Strengths:

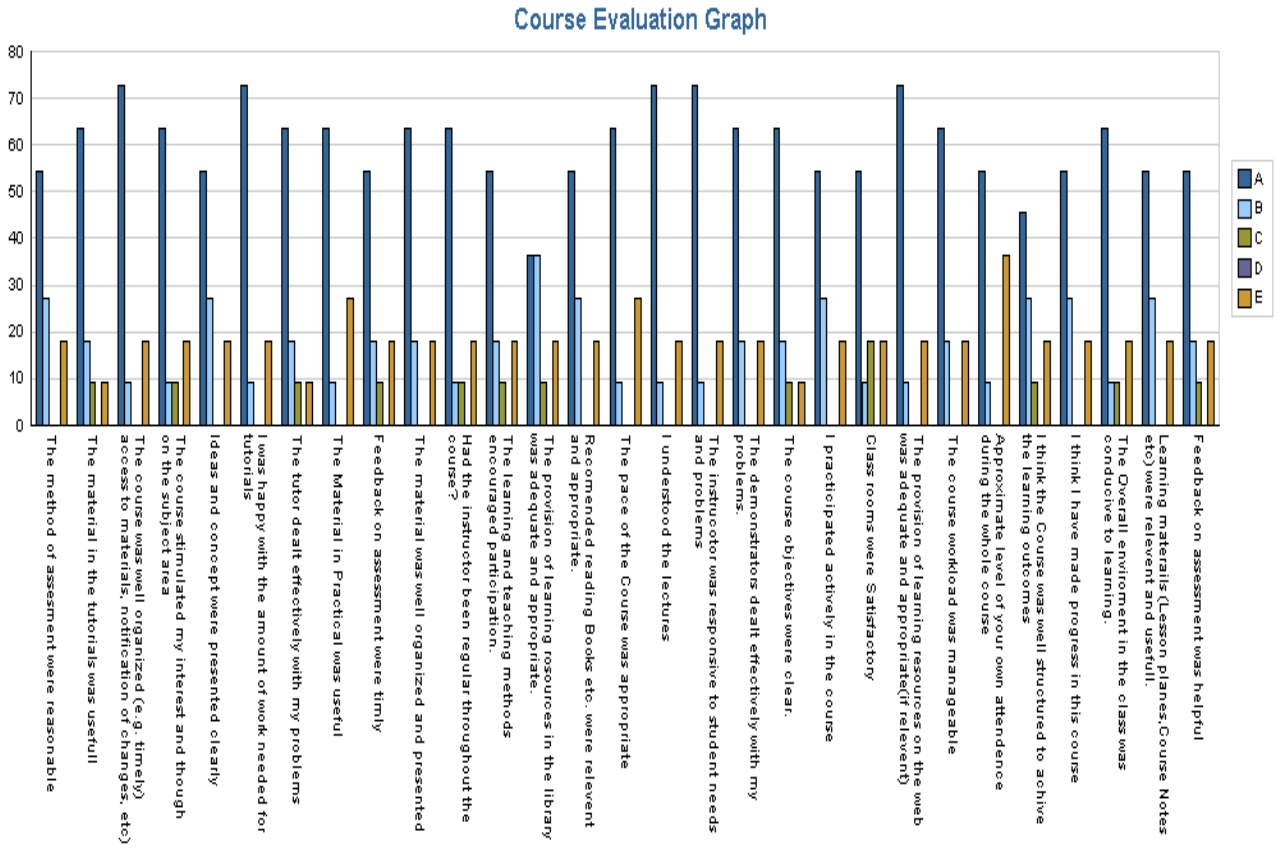
- Taught well
- Well organized material
- Effective teaching method

Weaknesses:

- More practical material needed
- More reference material needed

Iram Ilyas (Object Oriented Programming)

The graph for "Had the instructor been regular throughout the course" shows that 62% are strongly agreed, 10% are agreed, 10% are uncertain, 0% are disagreed and 18% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 45% are strongly agreed, 27% are agreed and 10% are uncertain 0% are disagreed and 18% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 36% are strongly agreed, 36% are agreed and 10% are uncertain 0% are disagreed and 18% are strongly disagreed. The graph for "The course objectives were clear" shows that 62% are strongly agreed, 18% are agreed, 10% are uncertain, 0% are disagreed and 10% are strongly disagreed. The graph for "The Course workload was manageable" shows that 62% are strongly agreed, 19% are agreed, 0% are uncertain, 0% are disagreed and 19% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 72% are strongly agreed, 10% are agreed, 0% are uncertain and 0% are disagreed and 18% are strongly disagreed.



General Comments of Students about this course:

Strengths:

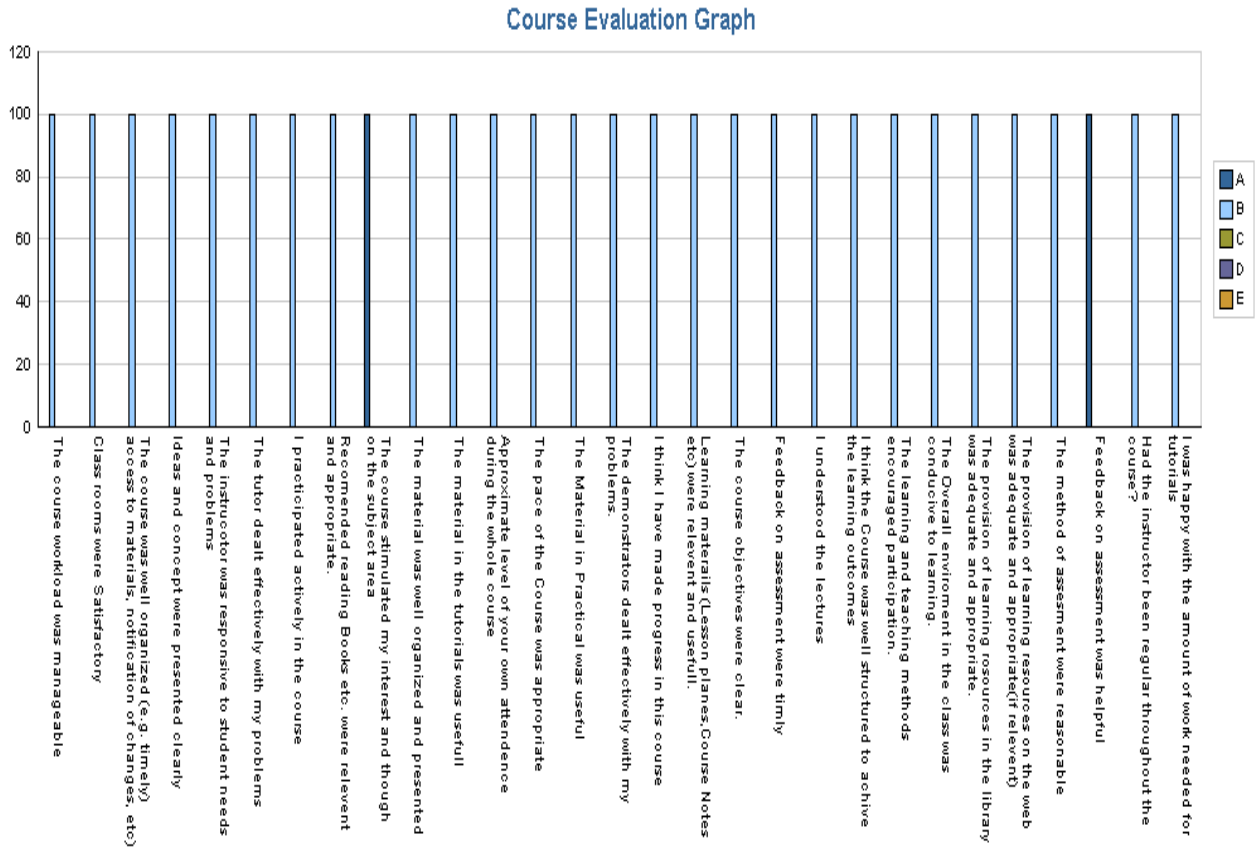
- Objectives well clear
- Good teaching method
- Effective practical work

Weaknesses:

- Tutorials should be added
- Need to create interest for students

Bushra Hamid (Software Engineering)

The graph for "Had the instructor been regular throughout the course" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 0% are strongly agreed, 100% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 0% are strongly agreed, 100% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

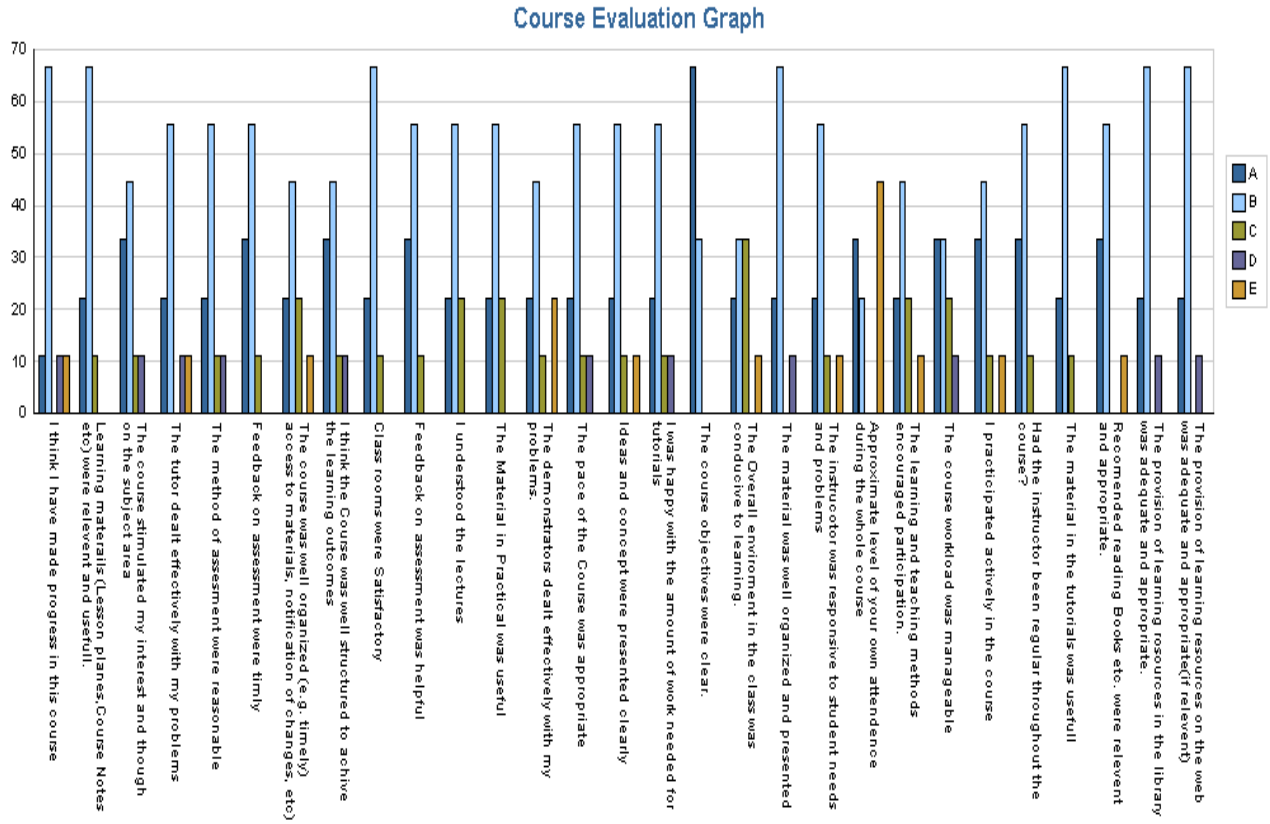
- Objectives well clear
- Good teaching method
- Listen student carefully

Weaknesses:

- Tutorials should be added
- More practical examples should be added

Sarfraz Bibi (Software Engineering)

The graph for "Had the instructor been regular throughout the course" shows that 34% are strongly agreed, 56% are agreed, 10% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 35% are strongly agreed, 45% are agreed and 10% are uncertain 10% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 22% are strongly agreed, 66% are agreed and 12% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 68% are strongly agreed, 32% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 33% are strongly agreed, 33% are agreed, 22% are uncertain, 12% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 22% are strongly agreed, 56% are agreed, 11% are uncertain and 0% are disagreed and 11% are strongly disagreed.



General Comments of the Students about this Course:

Strengths:

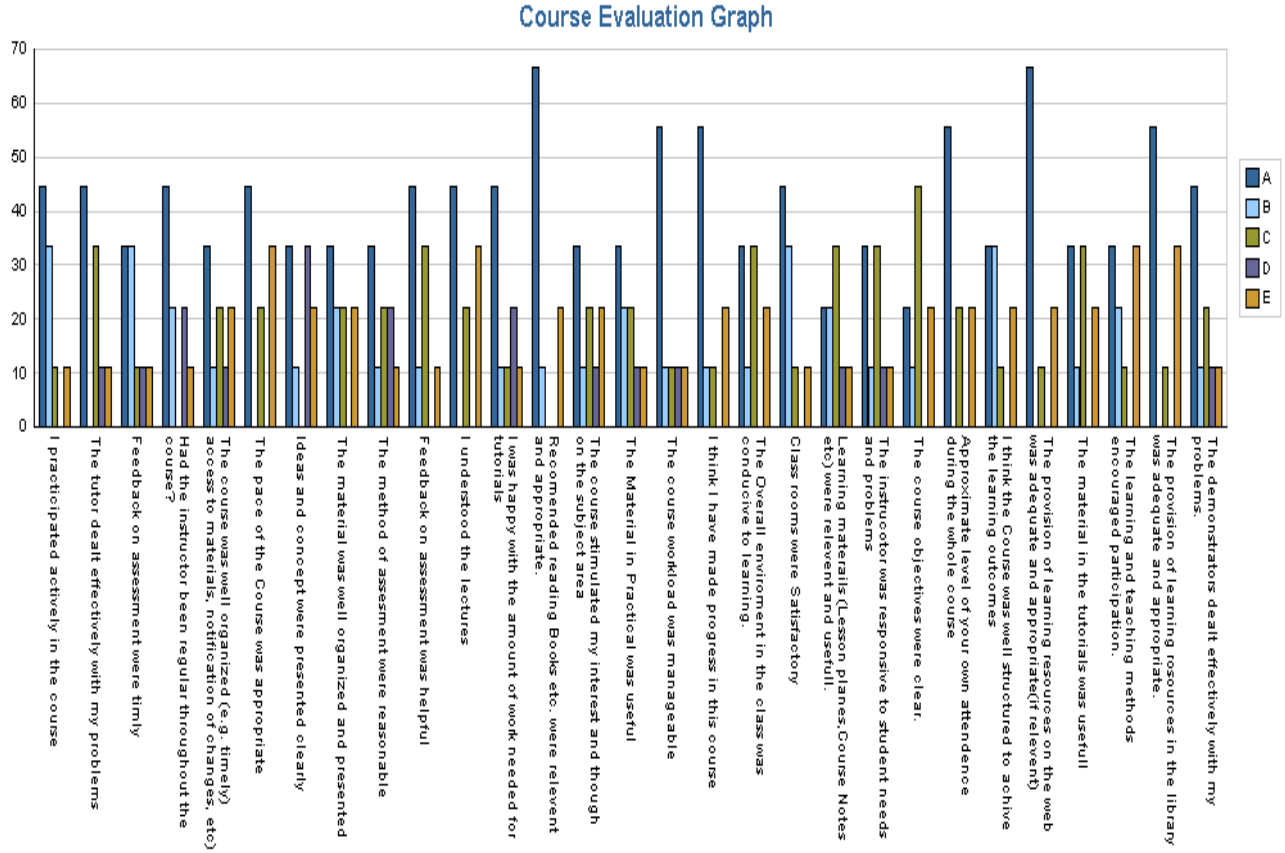
- Objectives well clear
- Progress in the course
- Listen student carefully and Responsive

Weaknesses:

- Tutorials should be added
- Workload was not manageable

Rubina Ghazal (Object Oriented Programming)

The graph for "Had the instructor been regular throughout the course" shows that 44% are strongly agreed, 22% are agreed, 0% are uncertain, 22% are disagreed and 12% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 33% are strongly agreed, 33% are agreed and 12% are uncertain 0% are disagreed and 22% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 55% are strongly agreed, 0% are agreed and 12% are uncertain 0% are disagreed and 33% are strongly disagreed. The graph for "The course objectives were clear" shows that 22% are strongly agreed, 12% are agreed, 44% are uncertain, 0% are disagreed and 22% are strongly disagreed. The graph for "The Course workload was manageable" shows that 56% are strongly agreed, 11% are agreed, 11% are uncertain, 11% are disagreed and 11% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 33% are strongly agreed, 12% are agreed, 33% are uncertain and 11% are disagreed and 11% are strongly disagreed.



General Comments of Students about this course:

Strengths:

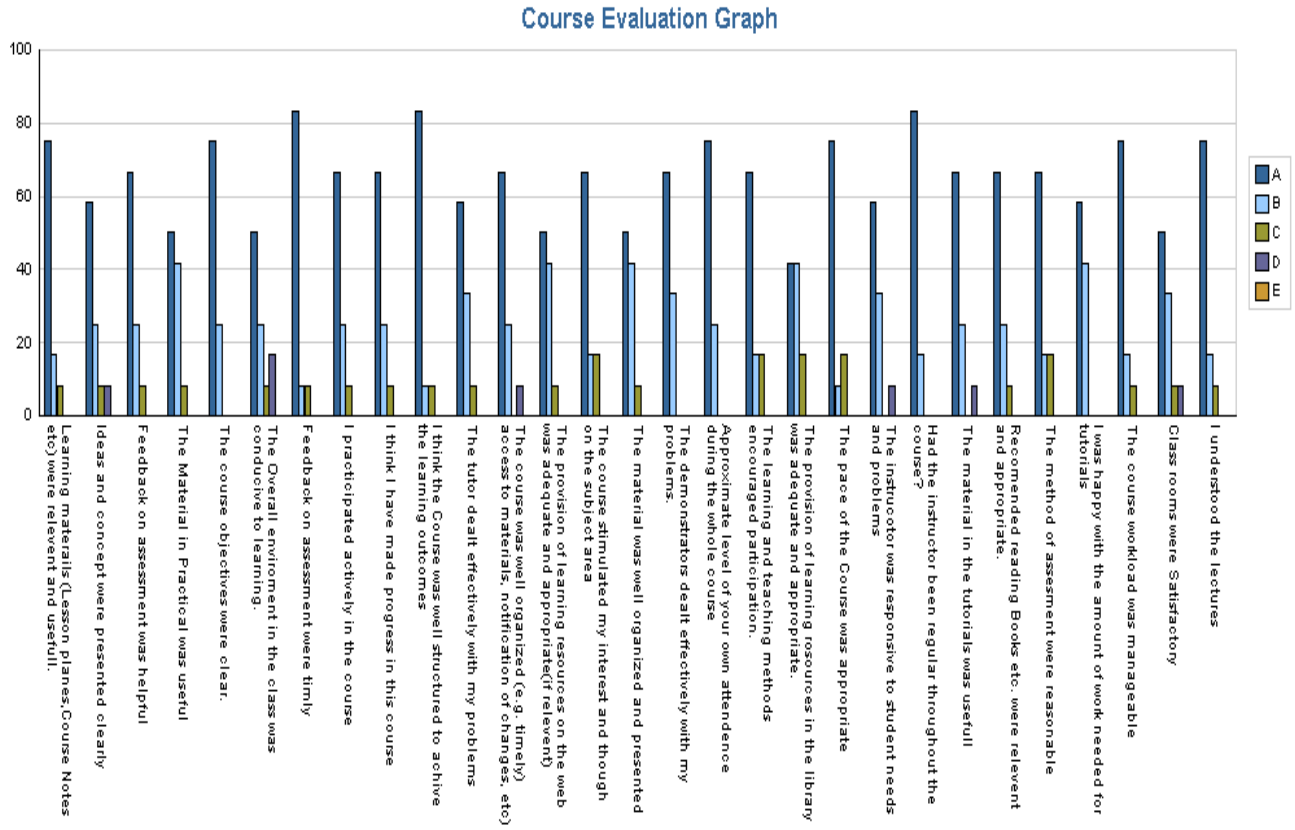
- Understanding of the course
- Good reference material was provided

Weaknesses:

- Objectives should be more clear

Muhammad Ahsan Arshad (Basic Electronics)

The graph for "Had the instructor been regular throughout the course" shows that 82% are strongly agreed, 18% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 82% are strongly agreed, 9% are agreed and 9% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 42% are strongly agreed, 42% are agreed and 16% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 76% are strongly agreed, 24% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 76% are strongly agreed, 14% are agreed, 10% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 58% are strongly agreed, 33% are agreed, 0% are uncertain and 9% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

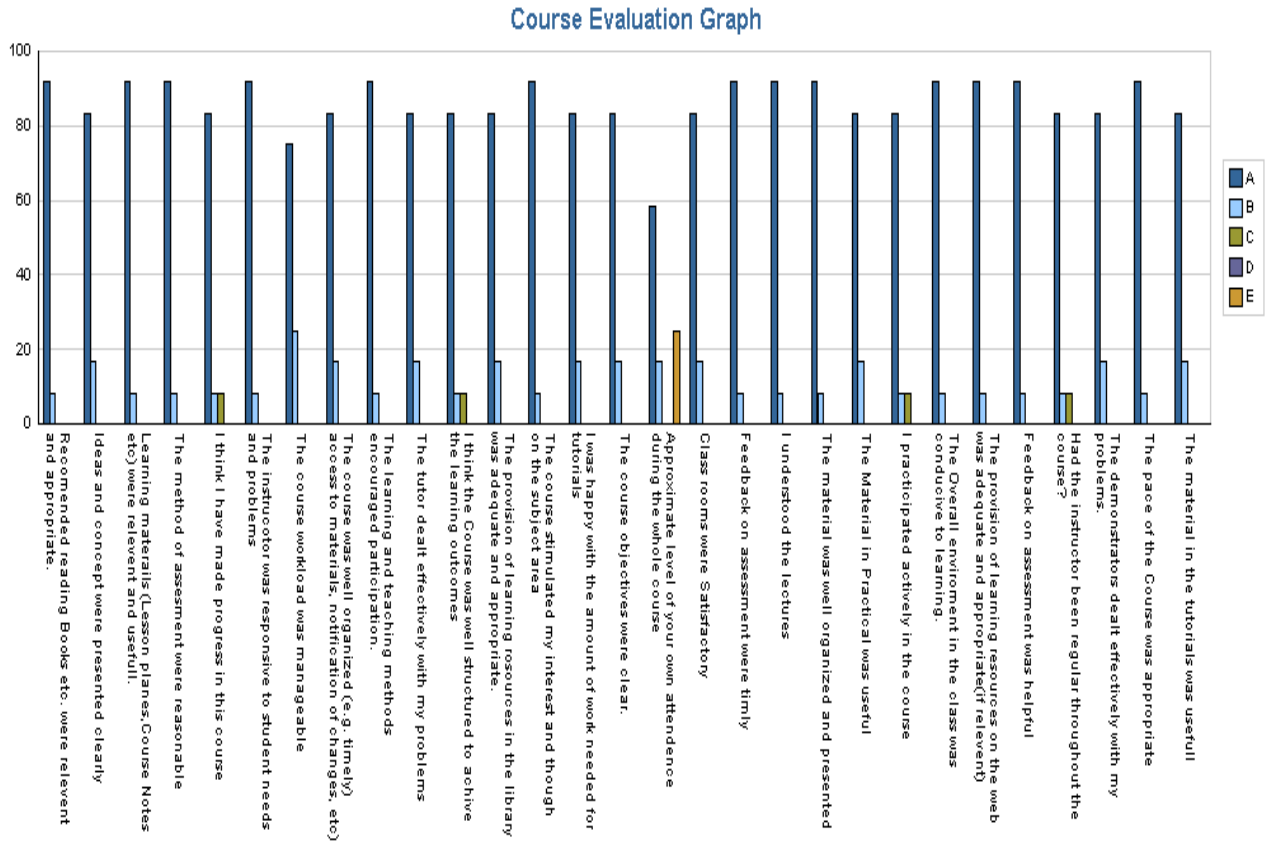
- Objectives well clear
- Reference material provided
- Well organized material

Weaknesses:

- The demonstration should be more effective

Muniba Batool (Communication & Presentation Skills)

The graph for "Had the instructor been regular throughout the course" shows that 82% are strongly agreed, 9% are agreed, 9% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 82% are strongly agreed, 9% are agreed and 9% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 82% are strongly agreed, 18% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 82% are strongly agreed, 18% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 76% are strongly agreed, 24% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 90% are strongly agreed, 10% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

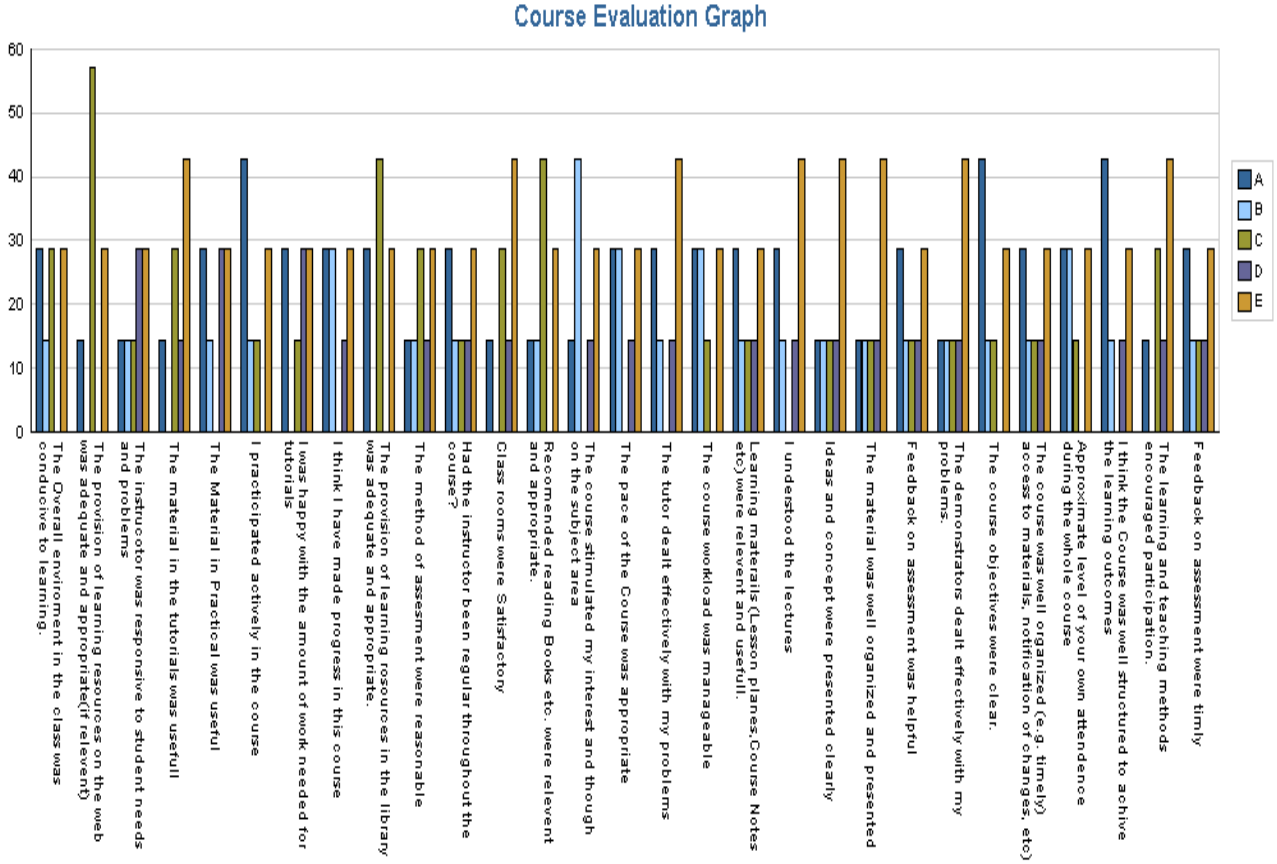
- Taught well
- Well organized material
- Effective teaching method

Weaknesses:

- More practical material needed
- More reference material needed

Sadia Naseem (Communication Skills)

The graph for "Had the instructor been regular throughout the course" shows that 29% are strongly agreed, 14% are agreed, 14% are uncertain, 14% are disagreed and 29% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 42% are strongly agreed, 15% are agreed and 0% are uncertain 15% are disagreed and 28% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 29% are strongly agreed, 0% are agreed and 42% are uncertain 0% are disagreed and 29% are strongly disagreed. The graph for "The course objectives were clear" shows that 42% are strongly agreed, 15% are agreed, 15% are uncertain, 0% are disagreed and 28% are strongly disagreed. The graph for "The Course workload was manageable" shows that 29% are strongly agreed, 29% are agreed, 13% are uncertain, 0% are disagreed and 29% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 29% are strongly agreed, 14% are agreed, 14% are uncertain and 14% are disagreed and 29% are strongly disagreed.



General Comments of Students about this course:

Strengths:

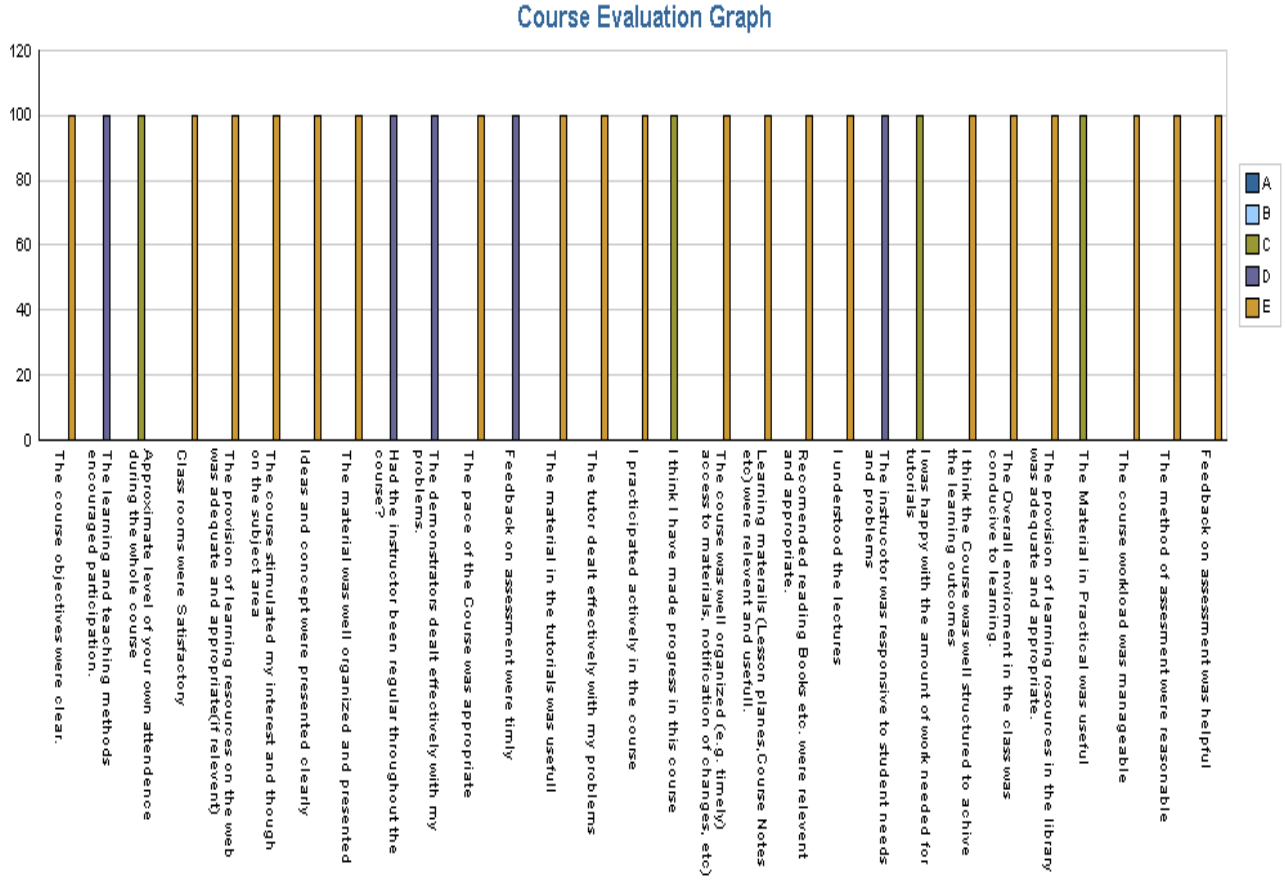
- Well organized course
- Reference material provided
- Teaching was effective

Weaknesses:

- More online resources should be provided

Humaira Naz (Financial Accounting)

The graph for "Had the instructor been regular throughout the course" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 0% are strongly agreed, 0% are agreed and 100% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 0% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 100% are strongly disagreed. The graph for "The course objectives were clear" shows that 0% are strongly agreed, 0% are agreed, 100% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 0% are strongly agreed, 0% are agreed, 100% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

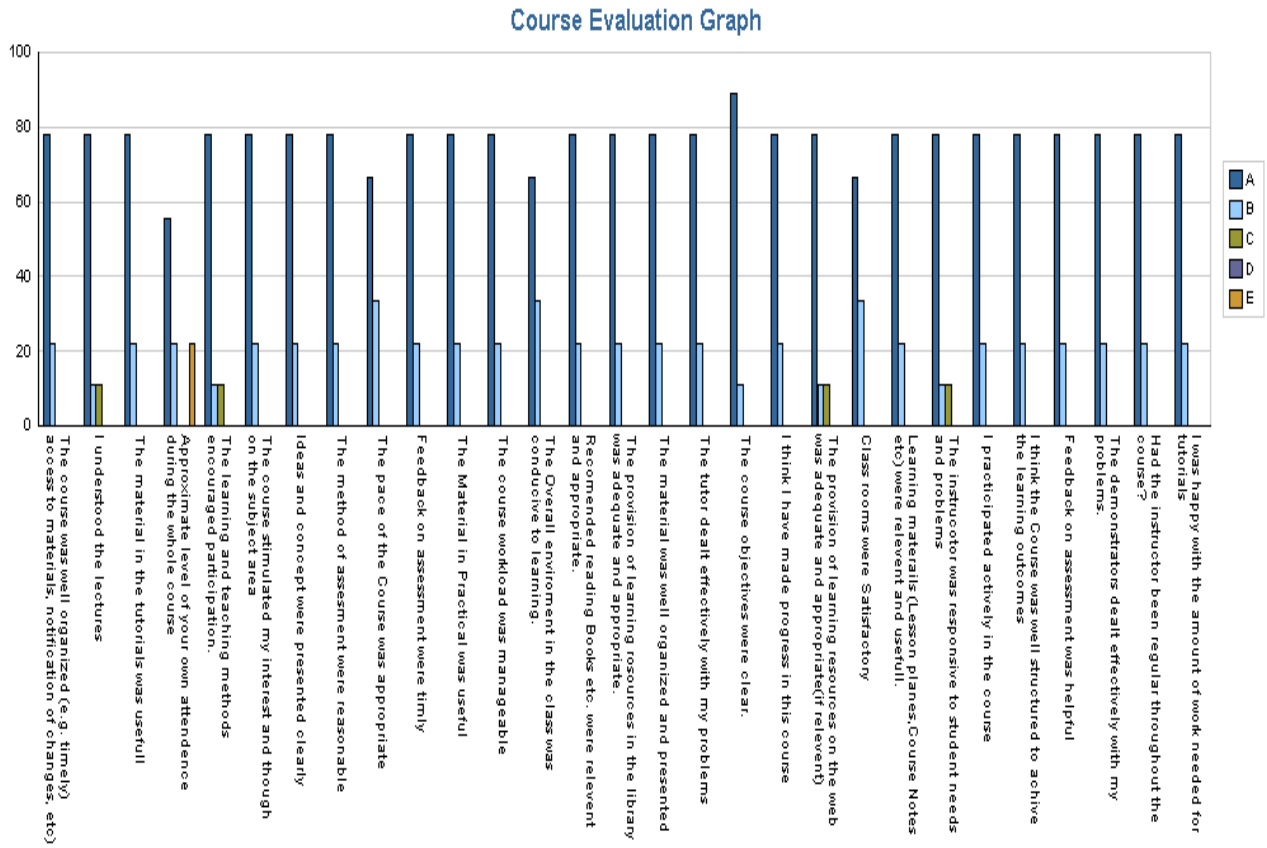
- Objectives well clear
- Listen student carefully

Weaknesses:

- Tutorials should be added
- More practical examples should be added

Humaira Naz (Financial Accounting)

The graph for "Had the instructor been regular throughout the course" shows that 78% are strongly agreed, 22% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 78% are strongly agreed, 22% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 78% are strongly agreed, 22% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 90% are strongly agreed, 10% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 78% are strongly agreed, 22% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 78% are strongly agreed, 11% are agreed, 11% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of the Students about this course:

Strengths:

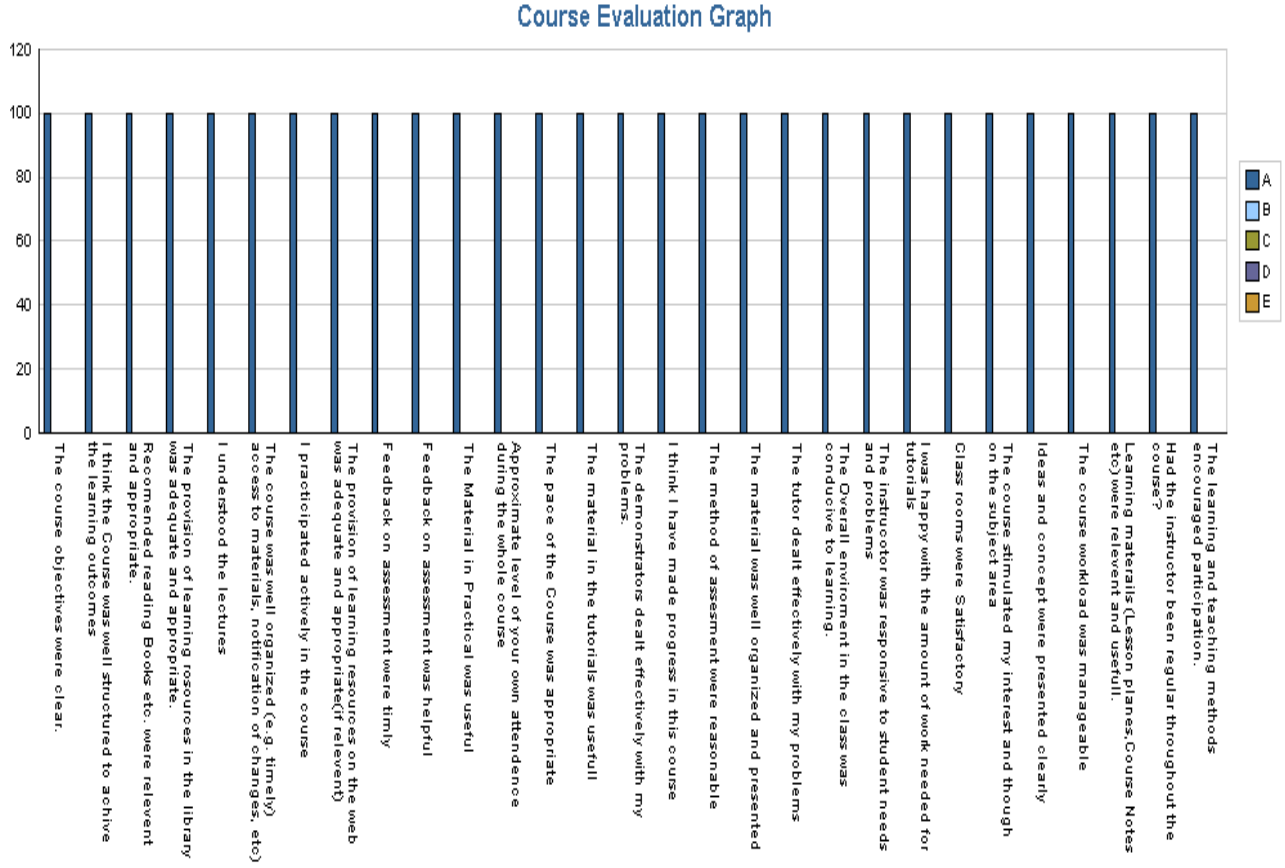
- Ideas and concepts provided
- Reference material provided
- Teaching was effective

Weaknesses:

- Learning environment and resources were not satisfactory.
- Course objectives must be clearly defined.
- The course should include modern knowledge and techniques.
- Learning and Teaching methods should be improved to encourage student participation

Muhammad Jamil (Financial Accounting)

The graph for "Had the instructor been regular throughout the course" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of the Students about this Course:

Strengths:

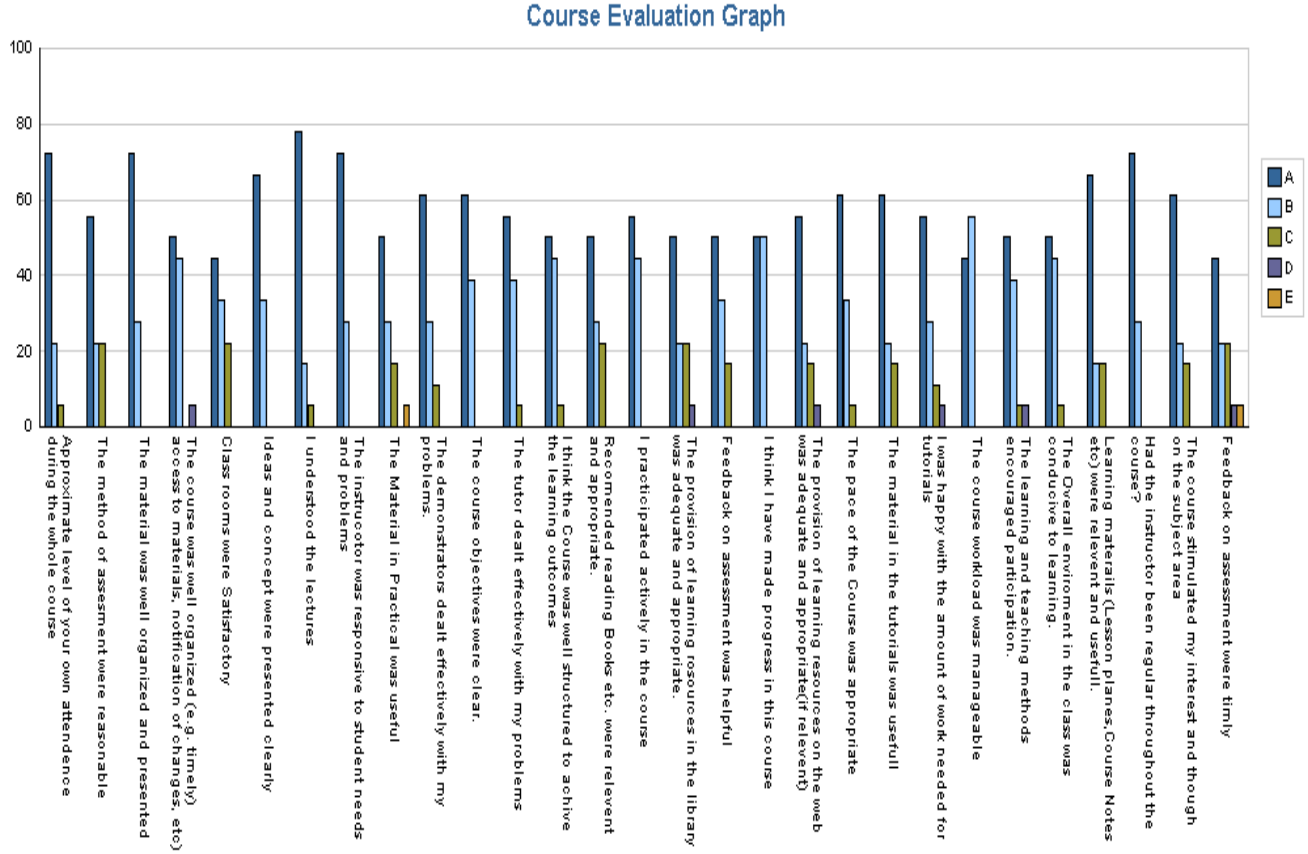
- Material was useful

Weaknesses:

- Proper materials were not available for practical demonstrations.
- Learning environment and resources were not satisfactory.
- The course should include modern knowledge and techniques.
- The course should be stimulated by interest and thought on subject area.

Ehtasham Azhar (Calculus and Analytical Geometry)

The graph for "Had the instructor been regular throughout the course" shows that 76% are strongly agreed, 24% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 50% are strongly agreed, 45% are agreed and 5% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 50% are strongly agreed, 22% are agreed and 22% are uncertain 6% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 62% are strongly agreed, 38% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 44% are strongly agreed, 56% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 70% are strongly agreed, 30% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

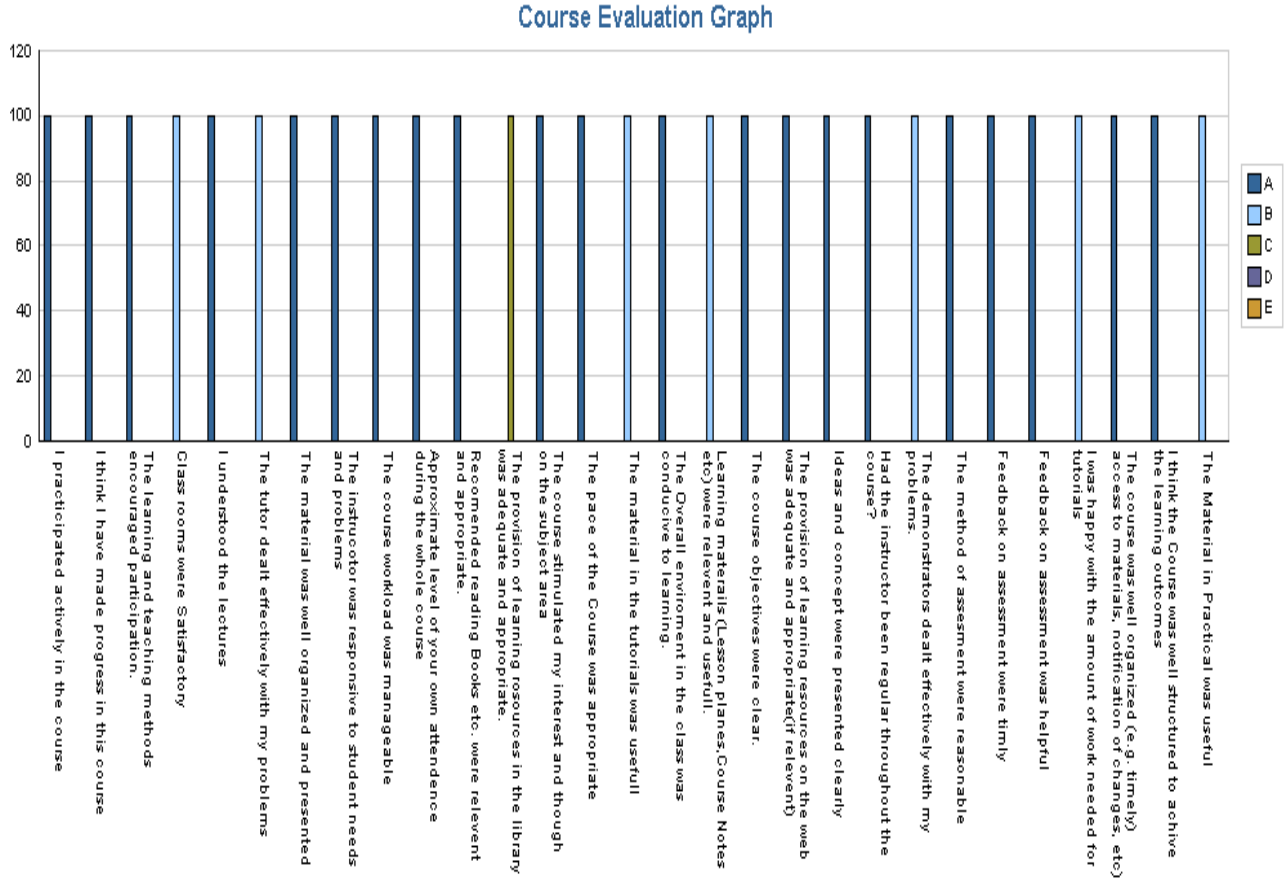
- Objectives well clear
- Good teaching method
- Listen student carefully

Weaknesses:

- More practical examples should be added for student interest

Muhammad Ali (Pakistan Studies)

The graph for "Had the instructor been regular throughout the course" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 100% are strongly agreed, 0% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 0% are strongly agreed, 100% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

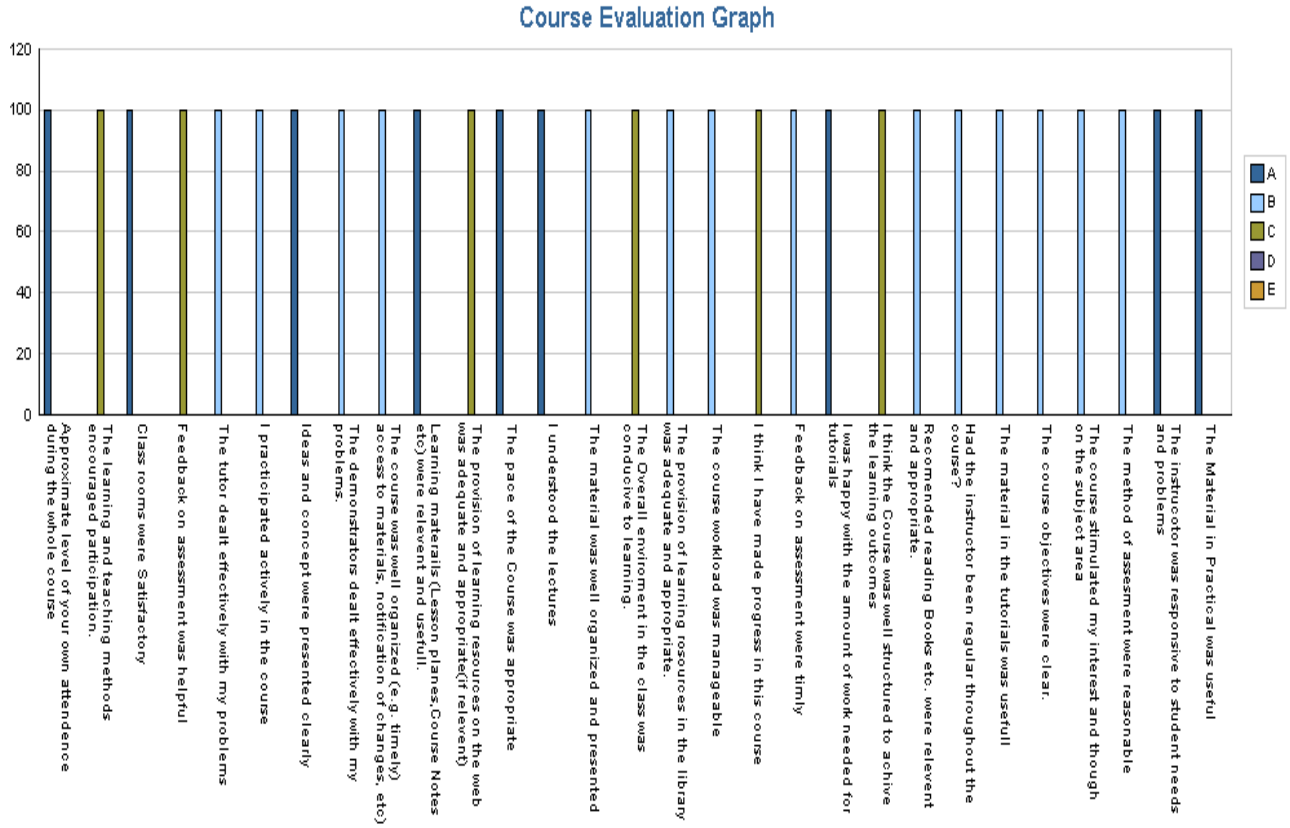
- Taught well
- Well organized material
- Effective teaching method

Weaknesses:

- More practical material needed
- More reference material needed

Sadaf Hamid (Statistics and Probability)

The graph for "Had the instructor been regular throughout the course" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "Course was well structured to achieve the learning outcomes" shows that 0% are strongly agreed, 0% are agreed and 100% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "Provision of learning resources in library was adequate and appropriate" shows that 0% are strongly agreed, 100% are agreed and 0% are uncertain 0% are disagreed and 0% are strongly disagreed. The graph for "The course objectives were clear" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "The Course workload was manageable" shows that 0% are strongly agreed, 100% are agreed, 0% are uncertain, 0% are disagreed and 0% are strongly disagreed. The graph for "instructor was responsive to student needs and problems" shows that 100% are strongly agreed, 0% are agreed, 0% are uncertain and 0% are disagreed and 0% are strongly disagreed.



General Comments of Students about this course:

Strengths:

- Understanding of the course
- Good reference material was provided

Weaknesses:

- Objectives should be more clear

ANNEXURES

ANNEXURE I: ALUMNI SURVEY

Since the BSSE Program has been launched in 2017 so there is none of the alumni yet produced.

Skills of Students as BSSE graduates

This is not applicable for BSSE degree program since it is launched in 2017.

Survey of Graduating Students

This is not applicable for BSSE degree program since it is launched in 2017 and no students were graduated from 2017-2019.

Best Aspects of the Program:

- Qualified faculty
- The students have the ability to work with lots of pressure
- Introduction to the new technologies, tools and equipment
- The environment is conductive to learning

Weaknesses:

- Not sufficient number of regular faculty members therefore, the institute is dependent on visiting faculty
- More lab time and practical work should be provided to the student which should be independent of the timetable and they can work in expedient mode.
- The curriculum needs to be updated

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

Strengths of Program/Institute

The course curriculum is well designed and updated. The institute has hired new faculty members to meet the needs of the students. The curriculum needs to be updated.

- ***Well planned and efficient***: The course curriculum is well designed and updated according to the guidelines provided by the HEC.

- ***Faculty enhanced:*** The institute has hired new faculty members to meet the needs of the students.
- ***Computer Labs:*** 3 labs have been updated with new PCs having latest specifications.
- ***PhD Faculty:*** Some PhD faculty members have joined back after the completion of their study leaves and they have PhD in the field of Information technology.
- ***Agriculture field:*** Some courses have been added in the program from the domain of agriculture to provide IT support to our real time agricultural problems.
- ***Mobile Phone Projects:*** Keeping in mind the increased usage of mobile phones, we encouraged IT students to develop android and iPhone applications in their final year projects. In this regard part time faculty has been hired who have expertise in this area.
- ***Hardware based Projects:*** Although hardware solutions are not in the scope of this degree but to fulfill the market requirements we are encouraging students to provide IT solutions using hardware support. Our faculty is capable enough to supervise such projects.

Weakness of Program/Institute

There should be less dependency on the visiting faculty. Although the institute has hired new faculty but still it is still not enough to meet the requirements as per students' strength. There should be some sitting place on the campus in extreme summer weather.

The weaknesses in the program are:

- ***Faculty Shortage:*** There should be less independence on the visiting faculty. Although institute has hired new faculty but still it is less according to the requirements.
- ***Space Shortage***: There should be some sitting place for students in the campus in extreme summer weather.
- ***Student Strength:*** Student strength should be according to resources (faculty and class rooms). Currently the students are more as compare to resources.
- ***Accreditation Approval***: There should be enough strength of faculty, infrastructure and other related requirement to fully accredit the program.
- ***Revised Curriculum:*** The curriculum needs to be updated to exact mapping with HEC. Revised curriculum for Computer Science and IT is also pending at HEC because we are following old version of 2012.

- ***Student Strength:*** Student strength should be according to resources (faculty and class rooms). Currently the students are more as compare to resources.

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

As the BSSE program is not a research-oriented program, but at MS levels, students along with the faculty have published their research papers in the leading research Conferences and Journals. The detail is present in the faculty resume.

Community Service provided by the institutes:

Although right now there is no such mechanism to provide technical support to the local community but UIIT faculty was actively involved in establishing the lab in schools in remote areas under the Chief Minister Punjab program. The institute has a plan to establish a wing, which will provide support to different organization, which is helping local community free of cost.

Table 3: Performance measures for research activities

Faculty	Publications in Journals	Publications in proceedings/abstracts	Research Projects
Dr. Yasir Hafeez	10	4	1
Dr. Saud Altaf	7	0	0
Dr. Syed Mushadd Gillani	7	6	0
Ms. Bushra Hamid	1	0	0
Dr.Kashif Sattar	4	0	0
Dr. Muhammad Azeem Abbas	3	3	1
Dr.Asif Nawaz	6	0	0
Ms. Rubina Ghazal	1	1	2
Dr.Tariq Ali	2	2	0
Mr.Saqib Majeed	1	0	0
Dr.Saleem Iqbal	10	4	1
Dr.Ehtsham Azhar	22	4	0
Dr. Saif Ur Rehman	4	4	0
Ms.Sarfarz Bibi	1	0	0
Ms.Sidra Tahir	1	0	0
Ms.Noureen zafar	1	0	1
Ms.Farhanda	0	0	0
Dr.Aqib	3	2	1
Dr.Jawad	2	0	1

Future Plans

The Management of UIIT has planned a number of research studies and practical work in future deal with the issues of computer science and information technology as according to the requirement of HEC.

Table 4: Quantitative assessment of the department

Sr. #	Particular	No.	Remarks
I	BSSE degree awarded	-	No degree awarded yet
II	BSIT degree awarded	-	--
III	BSCS degree awarded	-	--
IV	MCS degree awarded	-	--
V	MS (CS) degree awarded	-	--
Vi	Ph.D. degree awarded	-	--
VII	Post-Doc fellowship	-	--
VIII	Faculty: Students ratio	-	1:32
XI	Technical: Non-technical Ratio	-	Fulfils HEC criteria

CRITERION 2: CURRICULUM DESIGN AND ORGANIZATION

Degree Title: BSSE in Computer Science Intent:

All the courses for degree program are developed by a committee constituted by the Higher Education Commission, Pakistan. The committee consists of experts and learned professors, subject matter specialists from other universities and research organizations from Pakistan. When and if needed, curriculum for the University Institute of Information Technology is revised/updated through different bodies. At institutional level, Board of Studies, which comprises of senior faculty members, is responsible for updating the curriculum. This body is authorized to formulate a syllabus and course content. The Director of UIIT is the convener of this body. As per university rules courses after the approval from the UIIT Board, are placed before the University Academic Council for their approval.

A. Definition of Credit Hour

A student must complete a definite number of credit hours. One credit hour is one theory lecture or two hours laboratory (practical/week). One credit hour carries 20 marks.

B. Degree plan

Presently BSSE degree programs is organized by the department at graduate level.

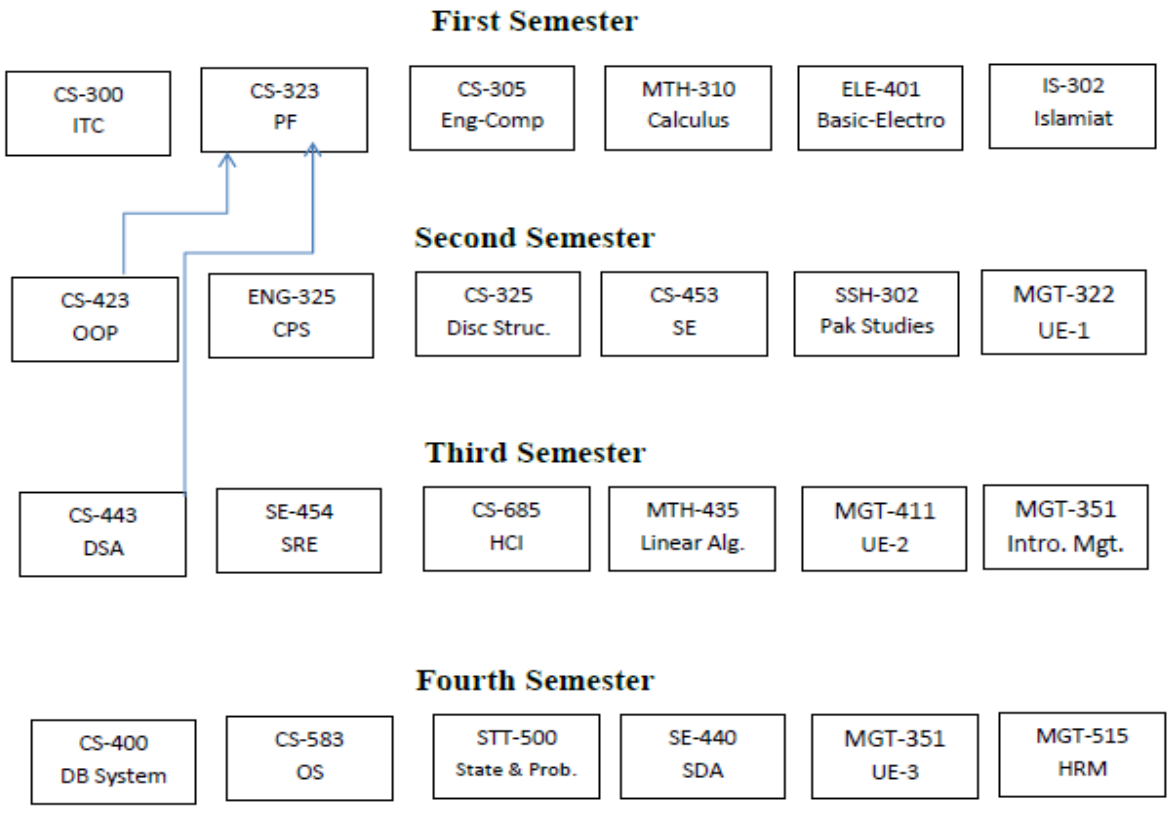
The BSSE degree program consists of 4 academic years/ 8 semesters.

There are total 24 courses of 72 credit hours in total as below:

Computing — Core Courses (46/72)	09 courses
Computing — Supporting Sciences (6/72)	11 courses
CS — Electives (20/72)	04 courses

University Institute of information Technology

Scheme of Studies BS (SE)



C. Curriculum Breakdown:

Table 5: Curriculum course requirements

Semester	Course Number	Core Courses	Elective Courses	Supportive Courses
1	6	01	00	05
2	6	02	01	03
3	6	03	01	02
4	6	03	02	01
Total/Credit Hour	24	09	04	11
Minimum Requirements	24	09	04	11

D. In our department, we are following the course outlines according to HEC criteria.

<u>Standard 2-1:</u> The curriculum must be consistent and support the program's documented objectives.

The table 6 given below shows the list of courses those are consistent with the programs objectives.

Table 6: Courses versus Objectives

Courses	Objectives					
	1	**2**	**3**	**4**	**5**	**6**
CS-323, CS-423, CS-443, CS-400, CS-583	+++	+	++	++	+++	+
CS-300, CS-453, CS-685, CS-440, MGT-351, SE-454	+++	++	++	+	++	++
MTH-310, ELE-401, CS-335, MTH-435, STT-500	+++	++	++	+	++	++
IS-302, SSH-302, MGT-322, MGT-411, MGT-351, MGT-515	+	+	++	++	++	+++
ENG-305, ENG-325,	++	++	+	++	++	+++

\+ = Moderately Satisfactory
++ = Satisfactory
+++ = Highly Satisfactory

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

The Table below shows the categorization of courses which play vital role in building theoretical background, problem analysis and designing a solution.

Table 7: Standard 2-2 Requirement

Element	Course Code	Course Title
Theoretical Background	ENG-305	English Comprehension
	IS-302	Islamic Studies
	ENG-325	Communication and Presentation Skills
	SSH-302	Pakistan Studies
	MGT-322	Financial Accounting
	CS-685	Human Computer Interaction
	MGT-411	Introduction to Management
	MGT-351	Introduction to Marketing
Problem Analysis	MTH-310	Calculus and Analytic Geometry
	CS-335	Discrete Structures
	MTH-435	Linear Algebra
	STT-500	Statistics and Probability
Solution Design	CS-300	Introduction to Information & Communication Technologies
	CS-323	Programming Fundamentals
	CS-423	Object Oriented Programming
	CS-453	Software Engineering
	CS-443	Data Structure and Algorithms
	SE-454	Software Requirement Engineering
	CS-400	Database Systems
	CS-583	Operating Systems
	SE-440	Software Design and Architecture

Assessment of BSSE Curriculum

The assessment of the BSSE degree program is shown in tabulated form which indicated the contribution of each course for the program outcomes.

- It contains the introductory computing course, middle level course and advanced computing courses.
- It contains mathematical courses which help in designing the mathematical modeling and developing numerical solutions.
- It contains the management and business courses to give students a flavor of business infrastructures.

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

The curriculum is designed according to the requirements of the Accreditation Council of Pakistan and is duly approved by the Academic Council of PMAS-AAUR.

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

The institute has its own faculty board comprising of ten members, one member from sister institute, two members from the academic council of PMAS-AAUR and seven members from faculty of UIIT. All courses of BSSE degree are designed according to the defined standard of HEC by the said faculty board and curriculum is duly approved by the academic council of the university.

Standard 2-5: The curriculum must satisfy general education, arts, and professional and other discipline requirements for the program as specified by the respective accreditation body/councils

Few courses specifically focus on the ethical building of the students. Professional ethics focus on rules, regulation used in the software industry. Mathematical background is built using the mathematical courses. To improve the English language, lectures are delivered in English medium to improve the skills presentations are conducted in most of the courses.

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

Programming skill is improved by managing the available skill in different courses. Basic skills are provided to the students in first semester in programming fundamental course. The organization of the code is improved in object oriented programming course in second semester, advance level programming is taught in 3rd and 4th semesters and 5 to 6 assignments are compulsory in every course, that improve the written skills of problem solving and presentation. The verbal communication is improved by providing the student to present a topic at the end of each semester to present their course projects.

Table 8(a): Credit Hour Division Between Major Areas

Category	Credit Hours	Cumulative Credit Hours
Computing-Core Courses	32	32
Supporting	31	31
Electives	12	12
Total Credit Hours	75	75

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

To enhance the communication skills of students, UIIT has included a number of General education courses as per HEC criterion.

Table 8(b): General Education Courses

Course Code	Course Title	Credit Hours
ENG-305	English Comprehension	3(3-0)
ENG-325	Communication and Presentation Skills	3(3-0)
SSH-302	Pakistan Studies	2(2-0)
IS-302	Islamic Studies	2(2-0)

CRITERION 3: LABORATORIES AND COMPUTING FACILITIES

The table contains the detail of the lab and computing facilities at UIIT.

Table 9: Laboratory Facility

Size of campus (in kanals)			9.3 kanals									
Covered area (sq. ft.)			51,165 sq. ft.									
Sizes of lecture rooms			Class Room 30' x 40'					Lecture Theater 30' x 50'				
Instructional facilities provided in lecture rooms			Multimedia White Board					Overhead Projectors Sound System				
General computing lab facilities: total number of PCs and lab hours			Approximately 100 hours Per Day Total PCs in Labs: 210 Labs Open: 8:00 am – 9:00 pm									
Nature and level of networking			Fiber Optic based Campus Wide LAN, Point to Point connectivity using fiber optic with 60MB of bandwidth.									
Specialized lab facilities and hours of their availability			CISCO (Router/Switch) GIS (Plotter/Scanner) DLD(Trainer/Oscillo scope) PhD Lab (1)		Linux Lab Teaching Lab Project Lab The labs are open almost the whole day from 8:00 am to 9:00 pm							
Student-to-computer ratio	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
	2.1:1 (309: 15 0)	2:1 (352:15 0)	1.3:1 (324:26 0)	1.4:1 (372:260)	1.2:1 (352:285)	1.3:1 (383:2 8 5)	1.2:1 (390: 28 5)	2:1 (410: 285)	2:1 (388: 156)	3:1 (457: 156)	3.5:1 (700: 170)	4:1 (800: 210)
Average lifetime of a PC in computing labs			3 to 4 years									
Library information			Area (sq. ft.)	Automated	Total Books			Total Computer Books	Total Journals (Give full details)	IEEE (Give full details)	ACM (Give full details)	
			1020	Automated	3604 In addition to university main library resources			2700	8 Journals	UIIT has an access to digital library services being extended by HEC		

Assessment of BSSE Curriculum

The assessment of the BSSE degree program is shown in tabulated form which indicated that contribution of each course for the program outcomes.

- It contains the basic programming courses, modern programming courses and advanced computing courses.
- It contains mathematical courses which help in designing the mathematical modeling and developing numerical solutions.
- It contains the management and business courses to give students a flavor of business infrastructures.

Standard 3-1: Laboratory manuals/documentation/instructions for experiments must be available and daily accessible to faculty and students.

Laboratory manuals for the entire practical subject are prepared and distributed among students. Manuals are present at the institute in the soft form.

Standard3-2: There must be support personal for instruction and maintaining the laboratories.

The detailed information of Laboratory is presented in Table 9. A total of 15 lab support staff is available at UIIT. The Lab support staff helps teachers in conducting different labs. Their main responsibilities include the lab maintenance, availability of related software for lab etc.

One lab person is available for each of the lab being arranged. Detail is given below:

Computer Lab support staff:	10
Multimedia Projector Count:	18
Over Head Projectors Count:	7
Total Lab Computers:	210
Total No. of Labs:	8

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

The UIIT provides enough computing facilities for students in the Lab. The total numbers of computers available for students use in multiple labs are 285 in 8 labs.

A student to computer ratio maintained in the year 2011-2012 is 1:2. The detailed information is presented in table 6.

CRITERION 4: STUDENT SUPPORT AND ADVISING

Our University organizes support programs for students and provide information regarding admission, scholarship schemes etc. Institute in its own capacity arranges orientation and guided tours of the institute. Director Students Affairs is also there and arranges various cultural activities and solves the students' problems. However currently there is no Parent/Teacher association.

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

Courses are taught as per HEC criteria.

- At undergraduate level subjects/courses are offered as per the scheme of study provided by the HEC and approved by Academic Council. Postgraduate level courses are however offered according to the availability of the teacher and a number of students.
- Elective courses are offered as per policy of HEC and the University.
- For postgraduate programs, a variety of courses are offered according to demand of the profession

Standard 4-2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty and teaching assistants.

Both theoretical and practical aspects are focused to prepare the students for professional challenges. Theoretical problems are explained and assignments are given to the students whereas, practical are carried out in the labs. Courses are structured and decided by the board of studies meeting. At commencement of each semester, faculty members interact frequently among themselves and with students. Students are welcome to ask questions in class and even after the class. Emphasis is always given for an effective interaction between each section of BSSE class.

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

Several steps have been taken to provide guidance to students by different ways such as:

- Students are informed about the program requirement through the director's office.

- Through the personal communication of the teachers with the students.
- Meetings are organized by the director of the institute for counseling for the students. In addition, students can also contact with the relevant teachers whenever they face any problem.
- Students can meet director of the institute whenever they feel need to meet on any serious issue.

  Realizing the need for exploring job opportunities for the university graduates, Directorate of Placement Bureau has been established.

Table 10: Teacher to Student Ratio at UIIT

2012-14	2014-2016	2016-18
1:35	1:33	1:30

CRITERION 5: PROCESS CONTROL

It includes students' admission, registration and faculty recruitment activities, which are dealt by various statutory bodies and the university administration.

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 process of admission is well established and is followed as per rules and criteria set by HEC. For this purpose, an advertisement is published in the national newspapers by the Registrar office.
- Admission criteria is to have passed the Intermediate Examination with at least second division or overall 45% Marks from a University recognized by the higher Education Commission (HEC), in Mathematics, Physics, Chemistry, Engineering, Computer Science, Commerce, Statistics, Economics, and Business Administration.
- Admission will be on open merit basis
- Admission criteria are revised every year before the announcement of admission.

<u>Standard 5-2:</u> The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

- The student name, after completion of the admission process, is forwarded to the Registrar office for proper registration in the specific program and the registration number is issued to the student.
- Registration is done for one time for each degree but evaluation is done through the result of each semester. Only those students, who fulfill the criteria of the University, are promoted to the next semester.

<u>Standard 5-3:</u> 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 institution mission statement. These processes must be periodically evaluated to ensure that it is meeting with its objectives.

- The recruitment policy followed by the University is the same as recommended by the HEC. Induction of all posts is done as per rule.
- Vacancies and newly created positions are advertised in the national newspapers, applications are received by the Registrar's office, scrutinized by the scrutiny committee, and call letters are issued to the shortlisted candidates on the basis of experience, qualification, publications and other qualities/activities as determined by the University.
- The candidates are interviewed by the University Selection Board, and Principal and alternate candidates are selected.
- Selection of candidates is approved by the Syndicate for issuing orders to join within a specified period.
- Induction of new candidates depends upon the number of approved vacancies.
- The standard set by HEC are followed.
- At present, no procedure exists for retaining highly qualified faculty members. However, the revised pay scale structure is quite attractive.

- HEC also supports the appointment of highly qualified members as foreign faculty Professors, National Professors and deports them to the concerned institutes of the University.

<u>Standard 5-4:</u> The process and procedures 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.

- To provide high quality teaching, Institute periodically revises the curriculum in views of field requirements, innovations and new technology.
- With the emergence of new fields, new courses are introduced and included in the curriculum.
- Students usually buy cheap Asian editions of technology books. These are also available in the University library, where documentation, copying and internet facilities are available.
- Notes are also prepared by the teachers and given to the students.
- Most of the lectures are supplemented by overheads, slides and pictures.
- All efforts are made that the courses and knowledge imparted meet the objectives and outcome. The progress is regularly reviewed at the staff meetings.

<u>Standard 5-5:</u> 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.

The controller of examinations announces the date regarding commencement of examination. After each semester, the controller's office notifies results of the students. The evaluation procedure consists of quizzes, mid and final examinations, practical, assignments, reports, oral and technical presentations. For BSSE, the minimum pass marks for each course is 40.

CRITERION 6: FACULTY

<u>Standard 6-1:</u> 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

interests and qualifications of all faculty members must be sufficient to teach all courses, plan, modify and update courses and curricula. All faculty members must have a level of competence that would normally be obtained through graduate work in the discipline. The majority of the faculty must hold a Ph.D. in the discipline.

In the following table we have mentioned the overall courses, sections and available faculty. The entire faculty is either MS or PhD. In addition to these permanent faculty members, we have also visiting faculty members.

Table 11: Courses and Faculty Detail

Program area of specialization	Courses in the area and average number of sections per year	Number of faculty members in each area	Number of faculty with PhD degree
Area1.	***Software Engineering***		
Area2.			
Area3.			
Area4.			
Total:	05 Courses, 1 Sections	06	01

Below is the detail of faculty members at UIIT for the BSSE program.

A. Full-time Faculty Information

Table 12: Full Time Faculty Members at UIIT

Full-time Faculty Size	Number of faculty members with PhD	MS	Full Professors	Associate Professors	Assistant Professors	Lecturers	Teaching Assistants/Fellows
17	06	11	0	01	07	09	-

B. Part-time Faculty Information

Table 13: Part Time Faculty Members at UIIT

Part-time Faculty Size	Number of Part-Time Faculty Members with PhD	MS	Total Number of Courses Offered by the Institute	Number of Courses Taught by Part-Time Faculty per Year	Average Teaching Load per Part-Time Faculty Member
(Fall-17)	11	86	300	245	1:2
(Spring-18)	10	74	251	191	1:1.58

The entire faculty members are hired on the basis of the degree offered by the institute. As there is no specialization offered in degree the student enrolled get similar degree. So there is no distribution of faculty in all programs with respect to specialization.

<u>Standard 6-2:</u> 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. Effective Programs for Faculty Development

- The faculty members are sent to the training for the available resources. Currently many faculty members are studying in Pakistan and abroad in MS and PhD level studies.
- The institute provides them study leave with pay and sometimes allowance where possible for the institute.
- Internet is available to all the faculty members. The faculties also have access to the digital library and limited access to some well-known journals.
- The institute provides support for attending conferences through HEC. There are certain policy matters which a faculty members need to follow in order to get a positive feedback from the institute for travel grants for the conference.
- The university provides a certain amount of innovative research ideas to the faculty members.

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

The faculty members are not fully satisfied with the workload and the amount they get in the form of salary. Most of the faculty members are satisfied with the mix of research and teaching method.

The faculty members are satisfied with the support they are getting from the administration regarding the research and teaching. The faculty members are satisfied with overall climate of the institute. Not all the faculty members are satisfied with the job security. Most of the faculty members are satisfied that the institution is utilizing their capabilities in the good way. The faculty should be encouraged to continue excelling through the career. A table of Results of faculty Survey is at next Page. (Table 10 Result of Faculty Survey)

Table 14: Result of Faculty Survey

Sr.No	Parameters	Dr. Ysir Hafeez	Saqib Majeed	Dr. Azeem Abbas	Dr. Mushhad Gillani	Mr. Saleem Iqbal	Mr. Asif Nawaz	Ms. Rubina Ghazal	Ms. Busra Kiani	Ms. Farkhanda Qamar	Ms. Sidra Tahir	Mr. Tariq Ali	Mr. Ehtsham Azhar	Sarfraz Bibi	Ms. Noureen Zafar
1	Your mix of research, teaching and community service	A	A	B	B	C	A	B	C	B	B	B	B	B	B
2	The intellectual stimulations of your work.	B	B	B	B	C	B	B	B	B	A	A	A	B	C
3	Type of teaching /research you currently do.	A	B	A	B	C	A	B	B	A	A	B	B	B	B
4	Your interaction with students.	B	A	A	B	B	A	B	B	B	B	A	A	B	B
5	Cooperation you receive form colleagues.	B	B	A	B	B	B	C	B	A	A	B	B	B	B
6	The mentoring available to you.	B	B	B	B	C	B	B	C	B	B	B	C	C	B

8	Providing clarity about the faculty promotion process.	C	A	C	C	A	C	D	C	D	D	D	D	D	C
9	Your prospects for advancement and progress through ranks.	C	A	C	C	B	B	C	B	B	B	B	B	C	D
10	Salary and compensation package.	B	B	B	C	C	C	B	B	D	D	E	E	D	D
11	Job security and stability at the department.	B	A	B	B	B	C	B	B	A	A	D	D	C	B
12	Amount of time you have for yourself and family.	C	B	C	B	D	B	B	B	B	B	D	D	D	B
13	The over all climate at the department.	B	B	B	B	C	B	B	B	B	C	B	B	B	B

14	Whether the department is utilizing your experience and knowledge	C	B	A	C	B	B	B	B	B	B	B	B	B	B
15	What are the best programs / facts currently available in your department that enhance you motivation and job satisfaction	The MS Program and BSCS Program	Adminis-trative Support.	MS (CS), BS (CS)	MS and BSCS Program	–	-	NIL		NIL	NIL	NIL	NIL	NIL	NIL
16	Suggest programs/factors that could improve your motivation and job satisfaction?	It is better to offer new courses in the existing programs	NIL	More research oriented programs should be offered	NIL	Justified work load + Time for research + Better working environm-ent	-	NIL	Different workshop related to IT should be organized.	NIL	NIL	NIL	NIL	NIL	NIL

CRITERION 7: INSTITUTIONAL FACILITIES

According to this criterion, the institution must have the infrastructure to support new trends in learning such as e-learning including digital publications, journals etc.

- The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel. Insufficient library's technical collection of books. Recommended books and relevant journals of the programs are not available to the students.
- These aspects need to be strengthened in number and space.
- Classrooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities**.**
- The standard wise description of this criterion is given below.

Standard 7-1: The institution must have the infrastructure to support new trends in learning such as e-learning.

The university faculty has access to e-library and internet which is very supportive of the faculty. But faculty facing certain problems like

- Repeatedly power failure during the labs
- Faculty don't have access to many well-known journals those are relevant to the field.

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 University Central Library has very limited number of books, journals and periodicals. It's a small library in term of space and facilities with no catalogue systems. It does not meet the standards of a University Library. The institute has its own small library which has computer science related books. But this library also lacks the book related to the latest field and the field in which currently latest results are being conducted.

<u>Standard 7-3:</u> classrooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.

- The office environment is not comfortable to work at all during the summer.
- Classrooms have a limited size white board which ends after writing for a few minutes.
- Because of the fans, teacher keeps on speaking and voice don't reach ahead of 2nd or 3rd row in summer, so something should be done to replace fans with air condition.

CRITERION 8: INSTITUTIONAL SUPPORT

The university administration has been struggling hard to strengthen all the departments/institutes, upgrade them and establish new faculties and Institutes. The university is also trying to attract highly qualified faculty.

<u>Standard 8-1:</u> There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars.

At present institute is having a very meager financial resource to maintain the present needs of the institute. Individual research grants for students and faculty are mainly supporting the institutional research activities. There is a dire need for increasing the financial resources allocated to the institute to establish an institutional library, laboratories and computer facilities.

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

Below is the list of students in the BSSE program over past two years. UIIT is not accredited for a PhD Degree, therefore, Teaching Assistant positions are not available.

Table 15: Students Enrolled in BSSE in last two years

2017-18	2018-19
55	146

<u>Standard 8-3</u>: Financial resources must be provided to acquire and maintain library holdings, laboratories and computing facilities.

Following is the detail of the institution's budget for maintenance, library holdings, laboratories, computing facilities and faculty development.

Table 16: Financial Information about the institution and the Program

Total assets of the institution	PMAS-AAUR is a public sector University and UIIT is a constituent part of the university -- it is relatively hard to determine the exact value of its assets.				
Total endowment fund of the institution					
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Yearly budget for the past five years	47,449,336	52,009,374	54299318	62022461	71557530 (Estimated)
Institution's yearly budget for research and faculty development for the past five years [2]	N/A	N/A	N/A	N/A	N/A
Institution's yearly budget for library [1]	200,000	300,000	100,000	100,000	100,000

Institution's yearly budget for computing facilities	480,000	2,500,000	2450000	25,00,000	100,00,000
Total working capital of the department/school/ college that offers the program					
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Yearly budget of the department/school/ college that offers	**As Above**				
the program					
Department/school/ college's yearly budget for research and faculty development for the past five years					
Fee Structure	Regular Fee Rs. 28,500	Regular Fee Rs. 32,700	Regular Fee: Rs. 51,400	Regular Fee Rs. 60200	Regular Fee Rs. 60800
What are sources of income	Project of Most	Students fee and Govt. Grants			

SUMMARY AND CONCLUSION

The Self-Assessment Report (SAR) of the University Institute of Information Technology (UIIT), Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi for Degree Program Bachelors in Software Engineering (BSSE), introduced the institute and highlighted the significance of the said degree program. The programs' important features, objectives, outcomes and associated measures to assess those objectives, were each discussed in detail.

BSSE is a 4-year degree program aiming to provide a swift coverage of important Computer Science courses pertinent to the Bachelors level education. Therefore, selective courses are offered during the program, in accordance with the HEC requirements and international market trends, generally covering broader concepts and diverse topics at intermediate and advance levels. Moreover, the institute also includes some general courses in the curriculum of BSSE to enhance the oral and written communication skills of the students.

A detailed discussion of the assessment of the objectives of the BSSE degree program, based on specific criteria, was demonstrated in Table 1 along with the subsequent required actions.

The Alumni Survey showed the students' gratification towards this degree program. Along with, Employers Survey endorsed this degree program by illustrating the capabilities and professional performance in different aspects.

UIIT has a Full-Time Faculty Size of 22 but all the teachers are not involved with the BSSE degree program due to the comparatively small number of courses for this program. Professional training and availability of adequate research and academic facilities are provided to the faculty members according to the limited available resources. The evaluation of BSSE teaching faculty showed scores from 72% to 80%, while in Course evaluation; the teachers have scored from 70% to 85%.

Program Team Member:

Coordinator: **Dr. Yasir Hafeez** _____

Convener: **Ghulam Mustafa** _____

Members: **Ms. Rubina Ghazal** _____

Dr. Asif Nawaz _____

Ms. Iram Rubab _____

ANNEXURES

ANNEXURE I: EMPLOYER SURVEY

The results of Employer Survey in tabular form are given below:

		Excellent	Very Good	Good	Fair	Poor
I	**Knowledge**					
1	Math, Science, Humanities and professional discipline, (if applicable)	55%	24%	15%	3%	3%
2	Problem formulation and solving skills	50%	31%	6%	9%	3%
3	Collecting and analyzing appropriate data	49%	26%	17%	3%	6%
4	Ability to link theory to practice	37%	34%	17%	12%	0%
5	Ability to design a system component or process	45%	32%	9%	9%	5%
6	Computer knowledge	68%	9%	5%	9%	9%
II	**Communication Skills**					
1	Oral communication	36%	30%	18%	12%	3%
2	Report writing	39%	26%	17%	4%	13%
3	Presentation skills	39%	27%	17%	5%	12%
III	**Interpersonal Skills**					
1	Ability to work in teams.	49%	17%	31%	3%	0%
2	Leadership	32%	32%	21%	0%	14%
3	Independent thinking	37%	53%	11%	0%	0%
4	Motivation	42%	31%	12%	8%	8%
5	Reliability	42%	32%	0%	5%	21%
6	Appreciation of ethical values	48%	13%	16%	10%	13%
IV	**Work Skills**					
1	Time management skills	38%	50%	8%	4%	0%
2	Judgment	42%	27%	15%	12%	3%
3	Discipline	32%	44%	20%	4%	0%

ANNEXURE II: FACULTY RESUME

Name	Tariq Ali
Personal	Lecturer University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan Mobile: +92-051-9290154
Experience	Lecturer July 2012 to-date University Institute of Information Technology PMAS-Arid Agri. University (AAUR) – Rawalpindi - Pakistan
Honor and Awards	.
Memberships	
Brief Statement of Research Interest	Document classification ,Semantic Computing
Publications	

Name	Bushra Hamid
Personal	Cell No: 03325137197 Address-No p-1449, Ghazi Road Rawalpindi
Experience	Date:5-05-2009 Title: Lecturer Institution: PMAS,Arid Agriculture University, Rawalpindi
Honor and Awards	Merit scholarship in all semesters during Masters degree 2nd Position in class in MCS
Memberships	N/A
Graduate Students Undergraduate Students Honor Students	Years Degree Name 2010 PGD(IT) Abdul Raziq, Muzzamil Ahmed, M. Waris Bhatti 2010 PGD(IT) Hanif-ur- Rehman, Noor rehman 2010 PGD(IT) Tassawar Hussain, M. Bashir Feroz, M. Asif 2010 PGD(IT) Adnan Mumtaz , Nasir Shehzad, NaziaKhaliq
Service Activity	N/A
Publications	

Name	Dr. Syed Mushhad Mustuzhar Gilani
Personal	Room # 05, UIIT, PMAS-Arid Agriculture University, Rawalpindi, 0300-6604200
Experience	2009– Current UIIT, PMAS-Arid Agriculture University Rawalpindi Assistant Professor Major course taught during my tenure at UIIT so far include: MCS/MIT/PGD Computer Communication and Network Operating System Telecommunication Technologies
List supervision of graduate students, postdocs and undergraduate honors theses showing:	23
Publications	

Name	Dr.Yasir Hafeez
Personal	Associate Professor University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan office: +92-051-9290154
Experience	10 years Total and working at UIIT since 2004 University Institute of Information Technology PMAS-Arid Agri. University (AAUR) – Rawalpindi - Pakistan
Honor and Awards	N/A
Memberships	N/A
Brief Statement of Research Interest	Topics of interest include, but are not limited to: Requirements engineering process definition, measurement, and improvement Requirements negotiation, prioritization, and domain ontology construction Modeling of requirements, Requirements management and traceability Requirements in market-driven, service-oriented, and product line environments Requirements for highly complex systems on a global scale Social, cultural, global, personal, and cognitive factors in requirements engineering Industry and research collaboration, learning from practice, Agile Software development Practices
Publications	M. Ahsan,Y.Hafeez and M., Asim "Knowledge Modelling for e-Agriculture using Ontology" 2014, 10th International Conference on Open Source Systems and Technologies .

	S., A., Anwar, Y., Hafeez, and B., Hamid "Towards a Framework for Scrum Handover Process "Published in Proceedings of the Pakistan Academy of Sciences, Vol: 51, Issue December, 2014: PP: 265-275, (2014). Bibi, S., Y. Hafeez, Z., Gul, and S., Mazhar. "Requirement Change Management in Global Software Environment Using Cloud Computing". Journal of Software Engineering and Applications, 2014, Vol: 7, PP: 694-699. S. Nazir,Y., Hafeez ,T., Abbas, A.,Khatoon, and K. Bakhat"A Process Improvement in Requirement Verification and Validation using Ontology" 2014 IEEE Asia-Pacific World Congress on Computer Science and Engineering (APWC on CSE), 2014, Nadi,Fiji,. A., Akhater, Y., Hafeez, H., Aslam and M., Jamal "Role of requirement change in software architecture using Twin Peaks Model" IEEE 5th International Conference on Software Engineering and Service Science, 2014, Beijing, China. S. Sultana, Y., Hafeez, S. Asghar, and R. Azad "A Hybrid Model by Integrating Agile Practices for Pakistani Software Industry "Accepted in 24th International Conference on Electronics, Communications and Computers"2014, Puebla, MEXICO.

Name	Nasir Mehmood Minhas
Personal	Assistant Professor University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan Mobile: +92-333-5651973
Experience	January 28, 2008 to – date Assistant Professor University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan Overall 14 years experience of Teaching, Research, and Administration
Graduate Students	06

Name	EhtshamAzhar
Personal	Lecturer University Institute of Information Technology PMAS-AridAgricultureUniversity, Rawalpindi - Pakistan Mobile: +92-345-5379033
Experience	Lecturer July 2012 to-date University Institute of Information Technology PMAS-Arid Agri. University (AAUR) – Rawalpindi - Pakistan
Honor and Awards	.
Memberships	
Brief Statement of Research Interest	Neural Network ,Computational fluid dynamics, Numerical Analysis
Publications	Ehtsham Azhar, Z. Iqbal and E.N. Maraj, Impact of entropy generation on stagnation-point flow of Sutterby nanofluid: A numerical analysis, ZNA, 71 (2016) 837–848. Impact factor 0.886. Zaffar Mehmood, Ehtsham Azhar, Z. Iqbal and E. N. Maraj, Nanouidic Transport over a Curved Surface with Viscous Dissipation and Convective Mass Flux, ZNA, (2016) doi.org/10.1515/zna-2016-0353, December 2016. Impact factor 0.886. Zahid Iqbal, Ehtsham Azhar, Zaffar Mehmood, E.N. Maraj and Abid Kamran, Computational Analysis of Engine-oil Based Magnetite Nanofludic Problem Inspired with Entropy Generation, Journal of Molecular Liquids, 230 (2017) 295-304. Impact factor 2.740. E.N. Maraj, N.S. Akbar, Z. Iqbal and Ehtsham Azhar, Framing the MHD mixed convective performance of CNTs in rotatingvertical channel inspired by thermal deposition: Closed form solutions, Journal of Molecular Liquids, 233(2017) 334-343. Impact factor 2.740. Z. Iqbal, N.S. Akbar, Ehtsham Azhar and E.N. Maraj, MHD rotating transport of CNTS in a verticalchannel submergedwithHall current and oscillations, Eurpean Physical Journal Plus, 132 (2017) 143-156. Impact factor 1.521. Z. Iqbal, Zaffar Mehmood, Ehtsham Azhar and E.N. Maraj, Numerical Investigation of Nanofluidic Transport of Gyrotactic Microorganisms

	Submerged in Water towards Riga Plate, Journal of Molecular Liquids, 234 (2017) 296-308. Impact factor 2.740. Z. Iqbal, Rashid Mehmood, Ehtsham Azhar and Zaffar Mehmood, Impact of inclined magnetic field on micropolar Casson fluid using Keller box algorithm, Eurpean Physical Journal Plus, 132 (2017) 175-187. Impact factor 1.521. Z. Iqbal, Ehtsham Azhar and E.N. Maraj, Transport Phenomena of Carbon Nanotubes and Bioconvection Nanoparticles on Stagnation Point Flow in Presence of Induced Magnetic Field, Physical E Low Dimensional System and Nanostructure, 91 (2017) 128-135. Impact factor 1.904.

Name	Asif Nawaz
Personal	Lecturer University Institute of Information Technology PMAS-AridAgricultureUniversity, Rawalpindi - Pakistan Mobile: +92-333-3690007
Experience	01/2012-Till Date as Lecturer (Comp Sc.) at PMAS-Arid Agriculture University , Rawalpindi. 01/2011- 01/2012 as Lecturer (Comp Sc.) at Punjab Group of Colleges, Rawalpindi. 2/2009-12/2010 as Lecturer (Comp Sc.) at Cadet College, Rawalpindi. 7/2007-08/2008 as Intern (NIP). at Planning Commission, Islamabad. 3/2006-7/2007 as Lecturer (Comp Sc.) at Wisdom Science College, Chowkara, Karak,
Honor and Awards	
Memberships	
Brief Statement of Research Interest	Data Mining, Social Media Analysis
Publications	

Name	Saqib Majeed
Personal	Assistant Professor University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan Mobile: +92-333-6905241
Experience	January 2004 to August 2016 Research Associate University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan August 2006 to June 2014 Lecturer University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan JUNE, 2014 to – date Assistant Professor University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan Overall 12years experience of Teaching, Research, and Administration
Memberships	Technical program committee member of ICIS 2015-2016
Brief Statement of Research Interest	Machine learning, Image retrieval, Natural language processing

Name	Dr. Saleem Iqbal	
Personal	Assistant Professor University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan Mobile: +92-333-6905241	
Experience	Assistant Professor (Computer Science)Jan 2012 - Date Assistant Director (Information Technology) Oct 2007 - Jun 2012 Visiting Faculty 2008 - 2011 Lecturer (Computer Science) 2003 - 2007	PMAS-AAUR (University Institute of Information Technology), Rawalpindi Cabinet Division, Islamabad Preston University, Islamabad COMSATS, Islamabad
Honor and Awards	• Certificate of Excellence " For excellent achievement in PhD thesis" • Merit thesis Award " For PhD thesis" • International Doctoral Fellowship " One year" • Appreciation for participation in 1st Pakistan Knowledge Festival	
Memberships	▪ Pervasive Computing Research Group, UTM, Malaysia Member ▪ Computer Science Teachers Association	

	Individual Membership (CSTA Membership # 5166258) ▪ International Association of Engineers Individual Membership (IAENG membership # 100345) ▪ International Association of Computer Science and Information Technology Membership for collaborative interdisciplinary research (Membership # 80331795) ▪ National Testing Service Contributor for MCQs in Question Bank of NTS
Research Interest	• Computer Communication & Networks • Network Security • Network Simulations
Publications	Journal Publications • Saleem Iqbal, Hanan Abdullah, Khalid Hussain, Faraz Ahsan, (2015) Channel Allocation in Multi-Radio Multi-Channel Wireless Mesh Network - A Categorized Survey. KSII Transactions on Internet and Information Systems Vol 9. No. 5. pp. 1642-1661 (Impact Factor 0.56) DOI: http://dx.doi.org/10.3837/tiis.2015.05.005 • Saleem Iqbal, Abdul Hanan Abdullah, MohdMurtadha Mohamad, KashifNaseer Qureshi, and Khalid Hussain (2016) Adaptive Interface Reconfiguration in Low-rate Mesh WPANs. Journal of Computational and Theoretical Nanoscience. Vol 13 No. 8 pp. 4703–4710 (Impact Factor 1.5) DOI: http://dx.doi.org/10.1166/jctn.2016.5340 Conference Publications ▪ Saleem Iqbal, Abdul Hanan Abdullah "Adaptive Interface Reconfiguration of Mesh WPANs in IOT Environment", Proceedings of the 14th International Conference on Applied Computer and Applied Computational Science (ACACOS '15) held in Kuala Lumpur, Malaysia on April 23 - 25, 2015. pp 104-110

Name	Ms. Sidra Tahir
Personal	Lecturer University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan office: +92-051-9290154
Experience	1.5 years of teaching experience at UIIT since April 2015 as permanent faculty. Member of different committees at department. PMAS-Arid Agri. University (AAUR) – Rawalpindi - Pakistan
	4 years in Higher Education Commission, IT Division as Computer Programmer.
	03 years as Quality Assurance Engineer in different Multinational Companies.
Honor and Awards	N/A
Memberships	N/A
Brief Statement of Research Interest	Information Retrieval Systems, Digital Libraries. Information Seeking Behavior. Software Engineering Practices. Global Software Development. Quality Assurance.
Publications	

Name	DR.Saud Altaf
Personal	Assistant Director University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan Cell no 03420654786
Experience	Software Developer (1.5 years) Assistant Director (2006-tilldate) University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan
Honor and Awards	Scholarship in PhD
Memberships	IEEE
Brief Statement of Research Interest	WSN,AI
Publications	K. Amritpal, S. Altaf, "Home Automation System via Internet using Android Phone", International Journal of Advance Computational Engineering and Networking (IJACEN), Vol. 4, Issue 10, 2016 (IF=2.25) S. Altaf, K. Amritpal, M. Kumar, "Modeling and Mathematical Performance Analysis of Xbee- based Smart Grid Monitoring Architectural System", Journal of Modeling and Optimization, Vol 9, No. 1, 2017. S. Altaf, M. Waseem Soomro, and M. Sajid Mehmood, "Fault Diagnosis and Detection in Industrial Motor Network Environment Using Knowledge-Level Modeling Technique," Modeling and Simulation in Engineering, (vol. 2017), 2017. (IF=0.58) S. Altaf, K. Amritpal, M. Kumar, "Modeling and Mathematical Performance Analysis of Xbee- based Smart Grid Monitoring Architectural System", The 4th International Workshop on Numerical Analysis and Engineering Applications (NAEA 2016) 30-31 December 2016, Hong Kong. K. Amritpal, S. Altaf, "Home Automation System Via Internet Using Android Phone", 2016 International Conference On Electrical, Electronics, Computer Science, Management and Mechanical Engineering (ICE2CSM2E-2016), Goa, India, 21th August 2016. K. Amritpal, S. Altaf, "Smart Sensor Setup Environment for Ubiquitous Indoor Nodes connectivity and Configuration" 6 th International Conference on Management Practices and Research (ICMPR-2016), New Delhi, India, 22nd July 2016.

	S. Altaf, A. al Anbuky, H. Gholamhusseini, "Fault diagnosis in Distributed Motor Network using Artificial Neural Network", (SPEEDAM2014) 22nd IEEE International Symposium on Power Electronics, Electrical Drives, Automation and Motion, Italy, 18-20 June 2014. S. Altaf, A. al Anbuky, H. Gholamhusseini, "Fault Signal Propagation in a Network of Distributed Motors", The 2014 IEEE 8th International Power Engineering and Optimization Techniques (PEOCO2014), Malaysia, 24-25 March, 2014.

Name	Ms.Noureen Zafar	
Personal	Lecturer University Institute of Information Technology PMAS – Arid Agriculture University Rawalpindi, Pakistan	
Experience	Lecturer (Computer Science)October 2016 - till Date Lecturer(Computer Science) Jan 2015- July 2016 Visiting Faculty Lecturer (Computer Science) Sep 2014 - Nov 2016	PMAS-AAUR (University Institute of Information Technology), Rawalpindi BIMS PAFWA
Honor and Awards	I have been awarded with "Vice Chancellor Talent Scholarship" in MCS and MS (CS).	
Research Interest	AI Data mining Image processing Neural network Databases Visual programming	
Publications	Journal Publications Segmentation of Crops and Weeds Using Supervised Learning TechniquePublished as chapter of Book titled as "Improving Knowledge Discovery through the Integration of Data Mining Technique".2015	

Name	Dr. Mamoona Humayun
Personal	**Assistant Professor (HEC Approved Supervisor)** University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan
Experience	**Assistant Professor** (5 years) University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan
Honor and Awards	
Memberships	
Brief Statement of Research Interest	Global software development Requirement engineering Knowledge management Web application security vulnerabilities
Publications	

Name	KASHIF SATTAR
Personal	kashif@uaar.edu.pk +92 300 5154327
Experience	Lecturer in University Institute of Information Technology, PirMehr Ali Shah University Rawalpindi, Pakistan, from March 14, 2005 to date. Worked as a Research Associate in Centre for Information Technology, PirMehr Ali Shah University Rawalpindi, Pakistan, from October 9, 2002 to March 13, 2005. Worked as Consultant Programmer in IRES (Innovative Research E-Solutions), Islamabad, Pakistan from September 01, 2001 to September 07, 2002.
Honor and Awards	HEC-IRSIP scholarship for PhD research at UNSW, Sydney, Australia from Sep-Feb, 2015 Lab Incharge in Baltoros Lab, School of Electrical Engineering and Computer Science(SEECS), National University of Sciences & Technology(NUST), Islamabad, Pakistan, from December 01, 2009 to September 10, 2014. Guest Speaker for 2-Days Workshop on "Network Monitoring" at UNIMAS, Malaysia December, 2012. Project Inchargeof PingER Pakistan project for HEC-PERN Junior Associate of The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy from December 1999 to December 2007. First prize winner in 1st software Exhibition in University of Agriculture, Faisalabad, Pakistan. Secured 2 Merit Scholarships during M.Sc. Computer Science. Secured 4 Merit Scholarships during B.Sc. Secured 2 Merit Scholarships during PITB Java Programme. Sun Certified Java Programmer

Memberships	Junior Associate Member ICTP IEEE Member IAHS Member PingER Member
Brief Statement of Research Interest	Routing, Topology Control and Channel Assignment in Multi-radio Multi-channel Wireless Mesh Networks. Topology Control and Channel Assignment in Cognitive Networks. Capacity optimization of Wireless Mesh Networks. Capacity optimization of WiMAX Networks. Escape Routing in PCBs Body Area Sensor Networks
Publications	KashifSattar, AnjumNaveed, and AleksandarIgnjatovic, “Mobility based Net Ordering for Simultaneous Escape Routing” (In Revision). KashifSattar, and AleksandarIgnjatovic. "Simultaneous Escape Routing using Network Flow Optimization." Malaysian Journal of Computer Science29, no. 2 (2016). Sheeraz A. Alvi, AdeelBaig and KashifSattar, “Frequency-Domain Backoff Mechanism for OFDM-Based Wireless LANs”, Arabian Journal for Science and Engineering, pp. 1-14, May 2016. KashifSattar and AnjumNaveed. "Ordered escape routing using network flow and optimization model." In Automation, Robotics and Applications (ICARA), 2015 6th International Conference on, pp. 563-568. IEEE, 2015.

ANNEXURE III: FACULTY COURSE REVIEW REPORT

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-542	Title:	Introduction To Information & Communication Technologies		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Sidra Tahir	No. of Students Contact Hours	Lectures (2 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term Quizes=4 (10%) Assignments=4 (10%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	56	19.64	46.43	25.0	8.93		0		0	56
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-685	Title:	Programming Fundamentals		
Session:	2017	Semester:	Fall		
Credit Value:	3(2-2)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Bushra Hamid	No. of Students Contact Hours	Lectures (3 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=4 (6.5%) Assignments=4 (6.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	43	2.33	11.63	46.51	32.56		6.97		0	43
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez _____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-652	Title:	Object Oriented Programming		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Iram Ilyas	No. of Students Contact Hours	Lectures (3 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects Quizzes=4 (10%) Assignments=4 (10%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	53	9.43	77.36	11.32	0.00		1.89		0	53
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	MTH-315	Title:	Software Engineering		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Sarfraz Bibi	No. of Students Contact Hours	Lectures (3 hours) Labs (0)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term Quizzes=4 (10%) Assignments=4 (10%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	49	4.08	10.20	28.57	30.61		26.5		0	49
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-323	Title:	Basic Electronics		
Session:	2018	Semester:	Spring		
Credit Value:	4(3-2)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Mr. Muhammad Ahsan Arshad	No. of Students Contact Hours	Lectures (3 hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=6 (7.5%) Assignments=6 (7.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	58	1.64	6.56	21.31	21.31		42.6		0	58
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-423	Title:	Object Oriented Programing		
Session:	2018	Semester:	Spring		
Credit Value:	4(3-2)	Level:	BSSE	Prerequisites:	CS-323
Name Of Course Instructor:	Ms. Rubina Ghazal	No. of Students Contact Hours	Lectures (3 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=6 (7.5%) Assignments=6 (7.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	52	0.00	18.87	28.30	28.30		22.6		0	52
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: _ Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-576	Title:	Programming Fundamentals		
Session:	2018	Semester:	Fall		
Credit Value:	3(2-2)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Sidra Tahir	No. of Students Contact Hours	Lectures (3 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=4 (6.5%) Assignments=4 (6.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	40	0.00	7.5	32.5	45.0		15.0		0	40
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-576	Title:	Programming Fundamentals		
Session:	2018	Semester:	Fall		
Credit Value:	3(2-2)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Bushra Hamid	No. of Students Contact Hours	Lectures (3 hours) Labs (2)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=4 (6.5%) Assignments=4 (6.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	49	0.00	6.0	42.0	38		12.0		0	49
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

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7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: __Dr. Yasir Hafeez_____ Date _____ (Director)

Performa 2

Faculty Course Review Report

(To be filed by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Computer Science		Faculty:	University Institute of Information Technology	
Course Code	CS-582	Title:	English Comprehension		
Session:	2018	Semester:	Spring		
Credit Value:	3(2-2)	Level:	BSSE	Prerequisites:	
Name Of Course Instructor:	Ms. Aisha Shafiq	No. of Students Contact Hours	Lectures (3 hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term, Projects, Labs Quizzes=4 (6.5%) Assignments=4 (6.5%)				

Distribution of Grade/ Marks and other Outcomes (adopt the grading system as required)

Undergraduate	Originally	%Grade	%Grade	%Grade	D	E	F	No	Withdrawal	Total
		A	B	C				Grade		
No Of Students	53	5.66	15.09	37.74	18.87		22.6		0	53
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Withdrawal	**Total**
No. of Students										

Overview /Evaluation (Course Co-Coordinator's Comments)

Feedback: first Summarize, then comment feedback received form:

(These boxes will expand as you type in your answer.)

1) Student (Course Evaluation) Questionnaires

2) External Examiners or Moderators (if any)

Nil

3) Student/Staff Consultative Committee (SSCC) or equivalent, (if any)

Nil

4) Curriculum: comments on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved/Revised National Curriculum Guidelines. *The course curriculum is in accordance with HEC approved guidelines*

5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course Objectives)

6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports

7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.

Name: ___Mr. Kashif Sattar_____ Date _____ (Course Instructor)

Name: _Dr. Yasir Hafeez_____Date _____ (Director)