Pir Mehr Ali Shah

Arid Agriculture University, Rawalpindi

Self Assessment Report

University Institute of Information Technology

PhD - CS Degree Program

2016-2018

Self Assessment Report

Programs Coordinator:	Dr. Yasir Hafeez
Convener:	Mr. Ghulam Mustafa
Members:	Dr. Saleem Iqbal
	Dr. Saud Altaf

CONTENTS

List of Tables

List of Figures

Introduction

Computers have been allotted an integral role to play and are changing the way lives are lived. They can be seen being used in all kinds of sectors and businesses. Keeping in view the above University Institute of Information Technology (UIIT) was established in 2001 to address this terrible need. Although computers are bringing the evolution of technology, it cannot be denied that there are areas where the impacts of the computer system are not fully recognized yet. The market needs committed professionals in IT and computer science. In developing countries like Pakistan, the use of computers will bring change in a big and astonishing way. It will lead to optimism, efficiency, productivity and high quality. 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.

A PhD in Computer Science is the highest degree in computing field which prepares a candidate to take up positions in academics and research related organizations. The PhD program at UIIT serves to produce up-to-date and experienced professionals in different specialized fields of computer science. This workforce would act as a backbone to the centers of higher learning and research in the country.

PhD Computer Science (CS) is a minimum 3 years (6 semesters) degree offered on-campus as a full-time and thesis (research) based program. This is a professional degree for students having Eighteen years of education who intend to pursue a scientific career in the computer science. The course contents is regularly revised and updated with the latest developments in the field of computer science. The recently emerging tools and technologies have been included in the syllabus. The institute provides a variety of specialization courses such as Software Engineering, Networks & Communication, Artificial intelligence/ Data Mining/Image processing/Computer Graphics and Database Systems to enhance student's professional training and career opportunities. It holds national seminars to exchange knowledge and information.

CRITERION 1: PROGRAM MISSION, OBJECTIVES AND OUTCOMES

The self assessment is based on a number of criteria. To meet each criterion several standards must be satisfied. This section describes how the standards of the Criterion are met.

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

Mission Statement:

The study at this level usually leads towards scientific discovery and technological innovation. First, we expect students to obtain a broad knowledge of computer science by taking courses from core, general course, supervisory courses and variety of sub-areas in computer science through specialization courses. Second, since the Ph.D. is a scholarly degree, a core objective of the program is to prepare computer science professionals who are able to conduct research of exceptional quality. By working closely with a research supervisor, a Ph.D. student is expected to develop a research project in one of the several sub-disciplines of computer science. Areas of research interest currently include Software Engineering, Computer Networks, Artificial Intelligence and Data Mining.

The main elements of strategic planning to achieve mission and objectives

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

1. To provide understanding of the processes of research and an in-depth study of an area of study this will enable the student to independently advance the frontiers of knowledge in computing sciences.
2. Produce and defend original research in the field of Computer Science.
3. Demonstrate in-depth knowledge of a particular subject area within field of Computer Science.
4. Actively participate in the Computer Science research community
5. Be able to effectively communicate the results of research

The assessment of program objectives through different criteria is presented in Table 1.1

Table 1.1: Programs Objectives Assessment

S #	Objective	How Measured	When Measured	Improvement Identified	Improvement Made
1	To provide understanding of the processes of research and an in-depth study of an area of study which will enable the student to independently advance the frontiers of knowledge in computing sciences.	Through their research activities	Regular process	Through domain specific courses domain knowledge can be enhanced.	New courses are offered in order to have in-depth knowledge of domain area.
2	Produce and defend original research in the field of Computer Science.	Through their research thesis and research papers.	Regular process	More productive research is required	In the initial classes, students are taught about the research methodologies. 2nd a new course "Research Methodologies" needs to be introduced.
3	Demonstrate in-depth knowledge of a particular subject area within field of Computer Science.	Through their research thesis and research papers.	Regular process	Students enrolled in this degree already have some filed of specialization, however, with in a specialization field, student need more in-depth knowledge of the research area.	New courses are offered in order to have in-depth knowledge of domain area.
4	Actively participate in the Computer Science research community	Students do not have knowledge about the local peers that are working in the same domain.		Students must interact with local peers in order to know about the research directions, other are working.	Students are encouraged to write and submit papers for local conferences.
5	Be able to effectively communicate the results of research	Students thesis		Students should be more elaborative in defining their research results.	Students re instructed to get help from the departmental resources and also from statistics department to learn about the comparison method of proposed and existing solutions.

Program Learning Outcomes

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

1. Formulate solutions to computing problems
2. Analyze and compare alternative solutions to computing problems
3. Communicate effectively, both orally and in writing
4. Think critically and creatively, both independently and with others
5. Identify, analyze, and synthesize scholarly literature relating to the field of computer science; and
6. Use software development tools, software systems, and modern computing platforms.

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.

The following table (1.2) shows the Program Outcomes and Their Relationship with Objectives.

Table 1.2 Program Outcomes and Their Relationship with Objectives

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

\+ = 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 around twenty faculty members in the institute, but not all of them are involved in teaching courses in PhD program. The teachers who teach courses in the PhD degree program, their summarized result is given in the graph below. Dr. Yasir Hafeez has scored 100%, Dr. Saleem Iqbal has scored 100%, Dr. M. Azeem Abbas has scored 100% and Dr. Saud Altaf has scored 100%. The comparison of their score is given below.

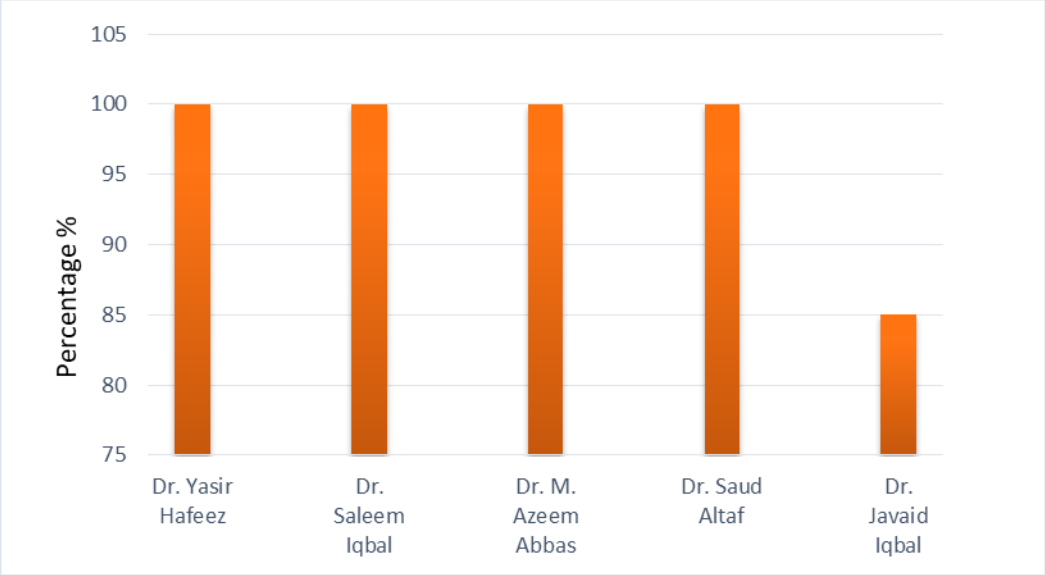

Figure 1.1: Teacher Evaluation Graph

Dr. Yaser Hafeez (SQA)

In Figure 1.2, the graph for “The Instructor provided course split schedule during the 1st week of semester” shows that 100% are strongly agreed. The graph for “The assigments and exam covered the materials presented in the course” shows that 100% are strongly agreed. The graph for “The course integrates theoratical concepts with real-world applications” shows that 100% are strongly agreed. The graph for “The course material is modern and updated” shows that 100% are strongly agreed. The graph for “The instructor arrives on time” shows that 100% are strongly agreed. The graph for “The instructor communicates the subject matter effectively.” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- Student actively participated in the course.

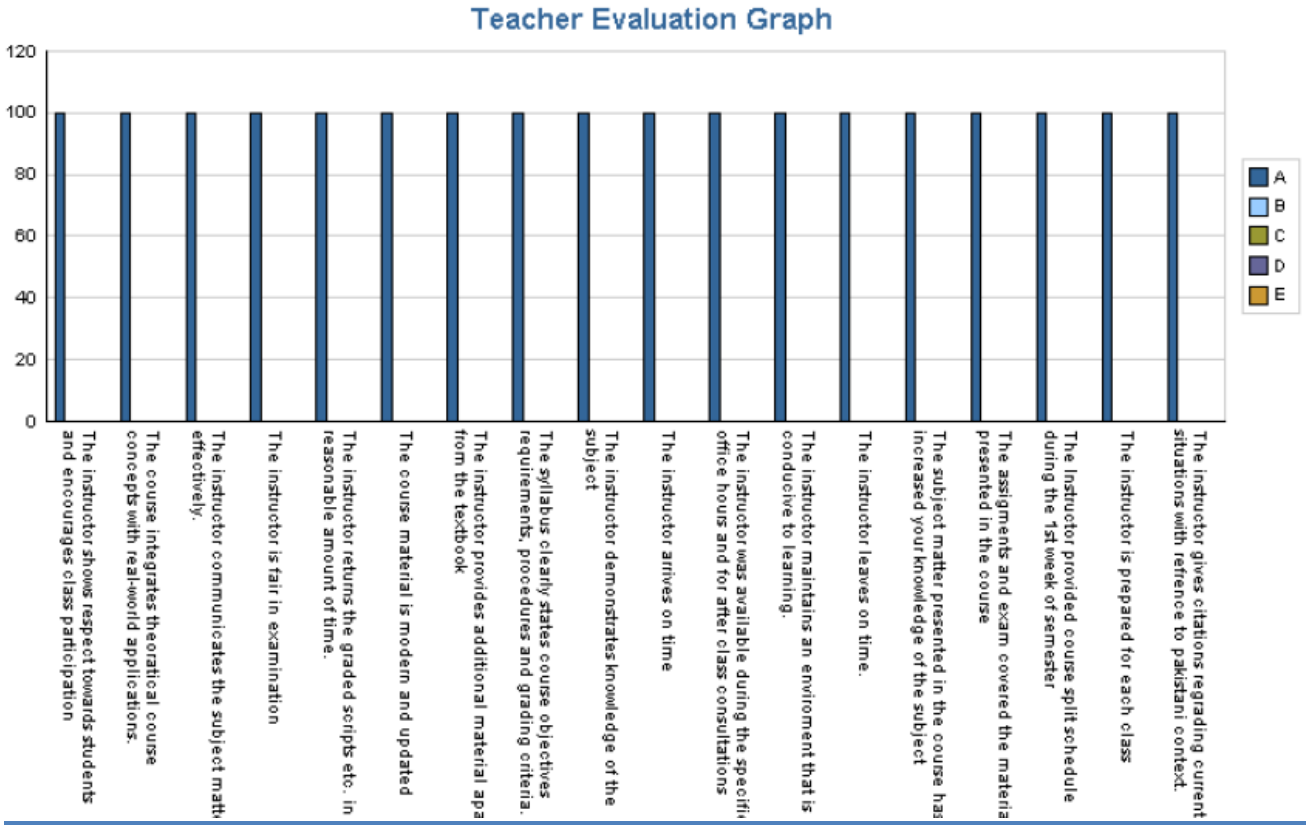

Figure 1.2: Teacher Evaluation Graph of Dr. Yaser Hafeez

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Dr. Saleem Iqbal (AOS)

In Figure 1.3, the graph for “The Instructor provided course split schedule during the 1st week of semester” shows that 100% are agreed. The graph for “The assigments and exam covered the materials presented in the course” shows that 100% are agreed. The graph for “The course integrates theoratical course concepts with real-world applications” shows that 100% are agreed. The graph for “The course material is modern and updated” shows that 100% are strongly agreed. The graph for “The instructor arrives on time” shows that 100% are strongly agreed. The graph for “The instructor communicates the subject matter effectively.” shows that 100% are agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

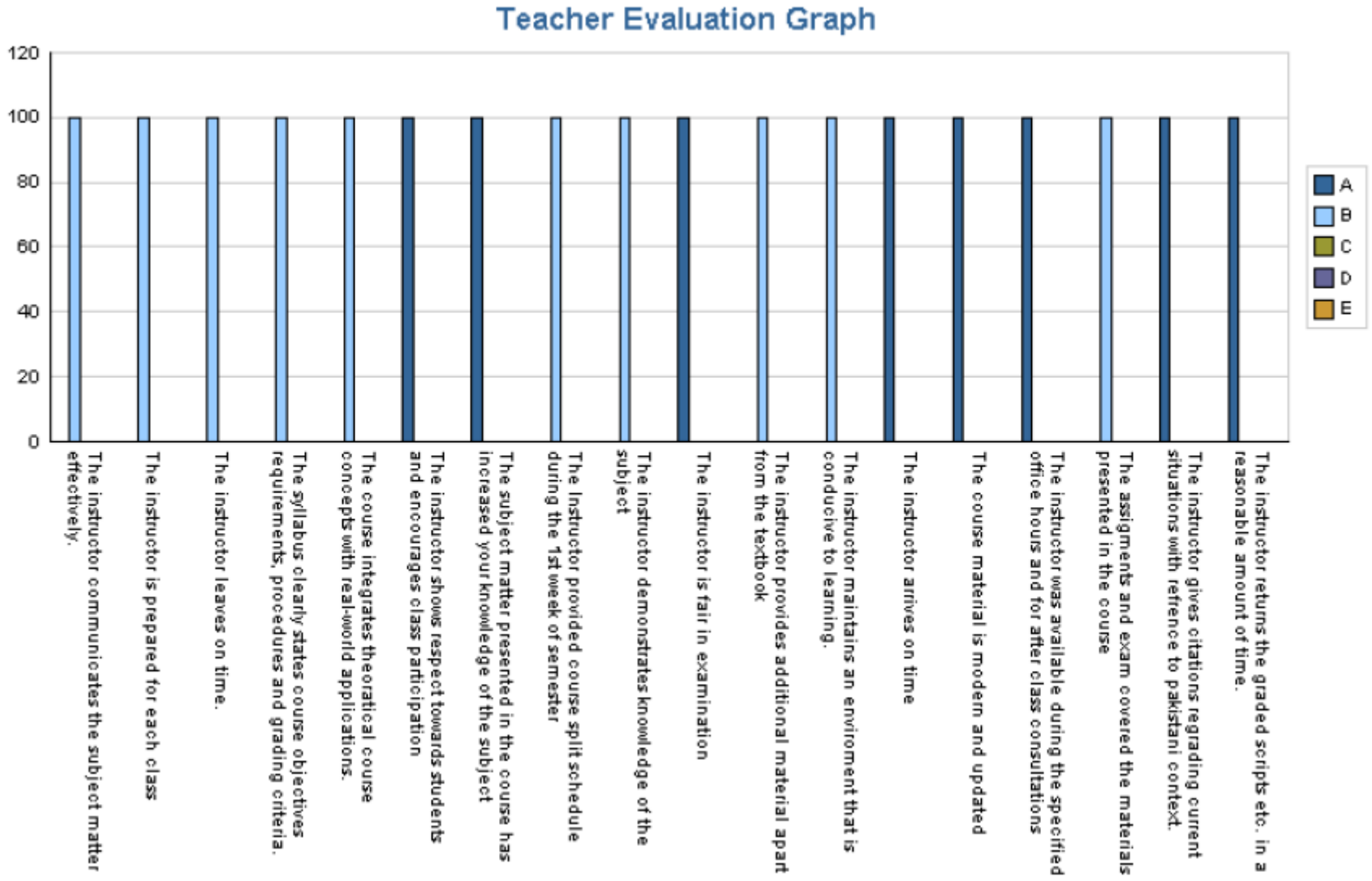

Figure 1.3: Teacher Evaluation Graph of Dr. Saleem Iqbal

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Dr. Muhammad Azeem Abbas (ARM)

In Figure 1.4, the graph for "The Instructor provided course split schedule during the 1st week of semester" shows that 65% are strongly agreed, 35% are agreed. The graph for "The assigments and exam covered the materials presented in the course" shows that 65% are strongly agreed, 35% are agreed. The graph for "The course integrates theoratical course concepts with real-world applications" shows that 65% are strongly agreed, 35% agree. The graph for "The course material is modern and updated" shows that shows that 65% are strongly agreed, 35% agree. The graph for "The instructor arrives on time" shows that 65% are strongly agreed, 35% agree. The graph for "The instructor communicates the subject matter effectively." shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- Course Workload was manageable.
- Students have made good progress in this course.

Weaknesses:

- Learning resources on web was not appropriate and adequate
- Class rooms were not satisfactory.

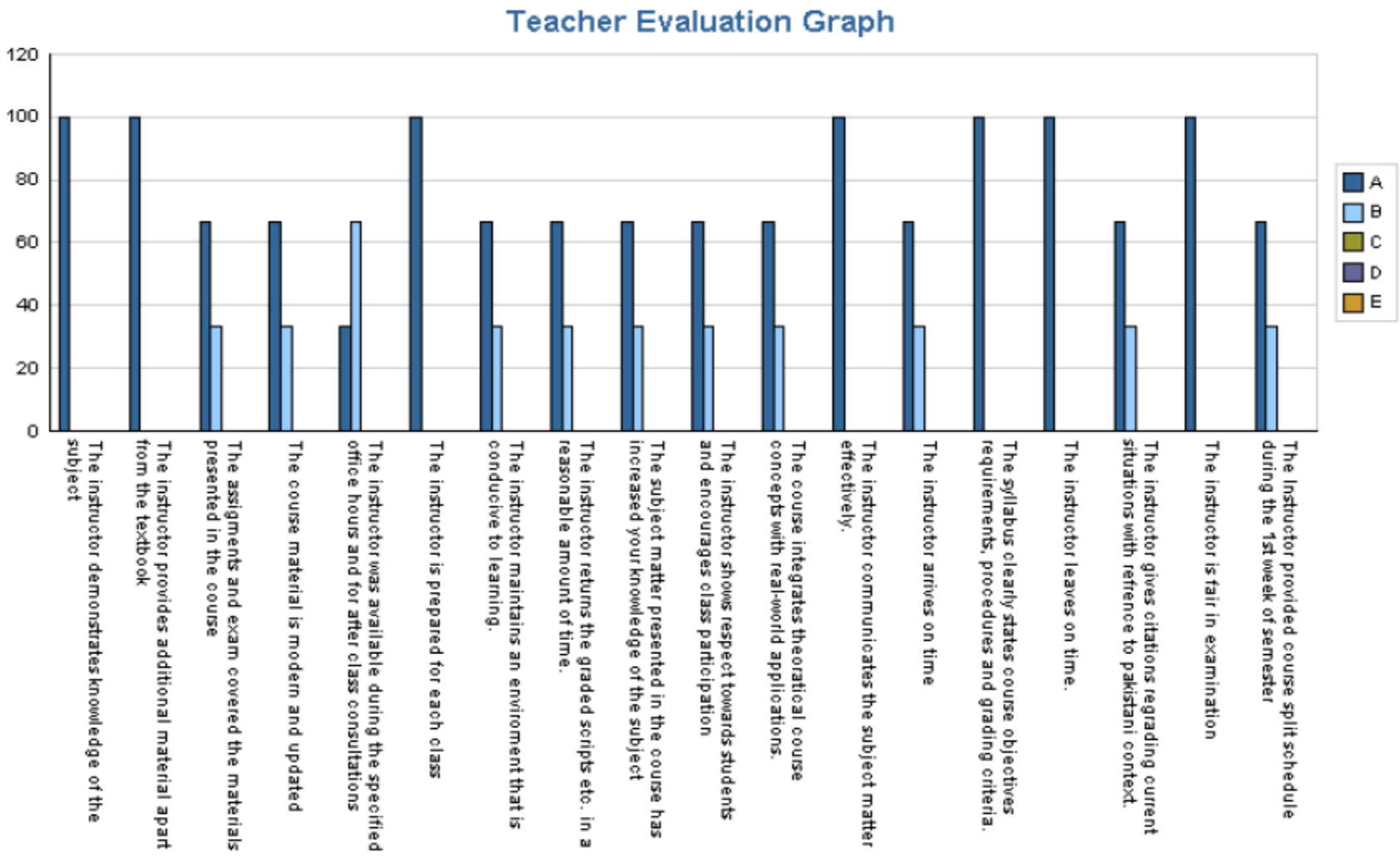

Figure 1.4: Teacher Evaluation Graph of Dr. Muhammad Azeem Abbas

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Dr. Saud Altaf (WN)

In Figure 1.5, the graph for “The Instructor provided course split schedule during the 1st week of semester” shows that 100% are strongly agreed. The graph for “The assigments and exam covered the materials presented in the course” shows that 100% are strongly agree. The graph for “The course integrates theoratical course concepts with real-world applications” shows that 100% are strongly agreed. The graph for “The course material is modern and updated” shows that 100% are strongly agreed. The graph for “The instructor arrives on time” shows that 100% are strongly agreed. The graph for “The instructor communicates the subject matter effectively.” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

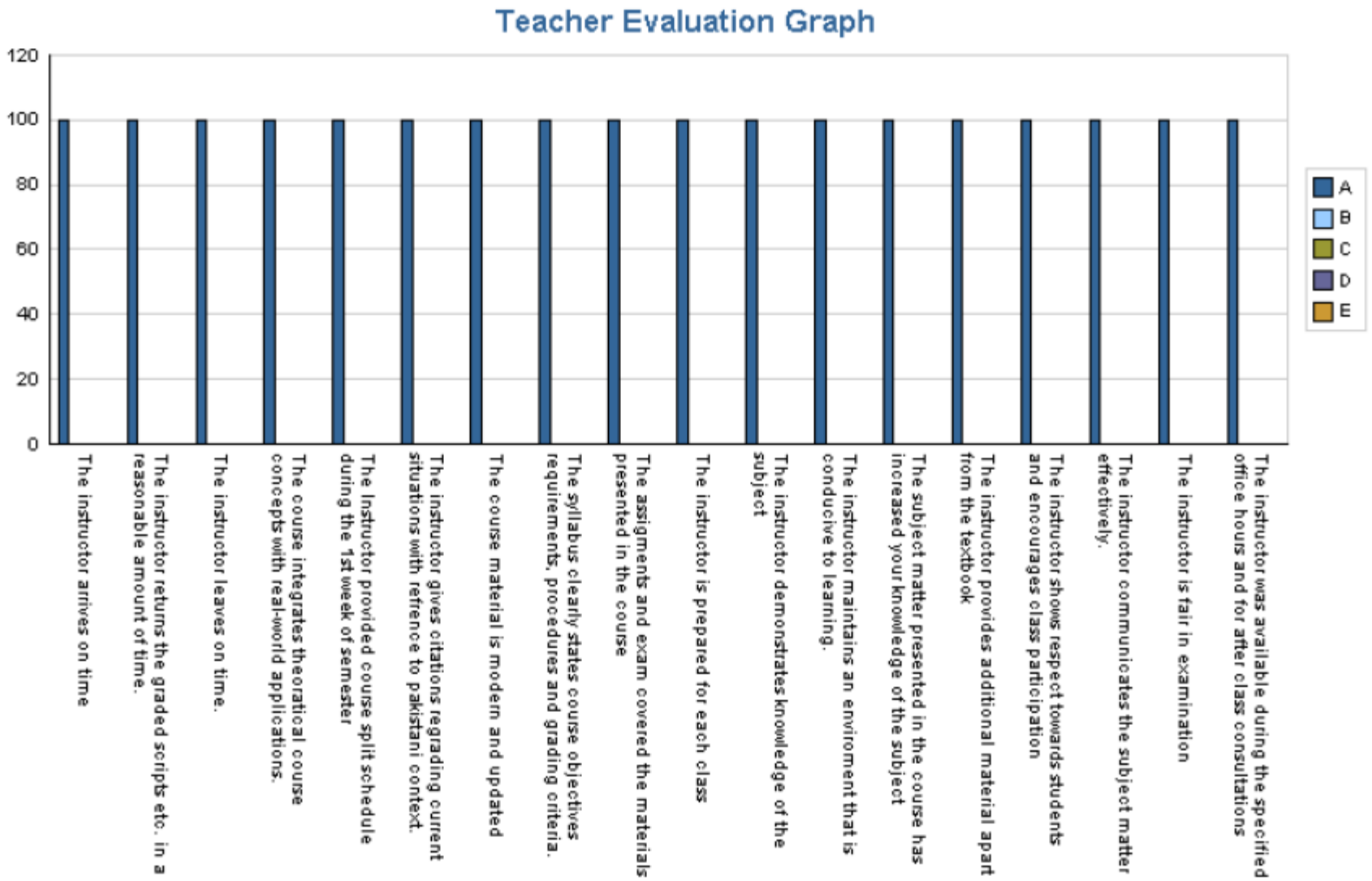

Figure 1.5: Teacher Evaluation Graph of Dr. Saud Altaf

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagre

Dr. Javaid Iqbal (DM)

In Figure 1.6, the graph for “The Instructor provided course split schedule during the 1st week of semester” shows that 100% are strongly agreed. The graph for “The assigments and exam covered the materials presented in the course” shows that 100% are strongly agree. The graph for “The course integrates theoratical course concepts with real-world applications” shows that 100% are strongly agreed. The graph for “The course material is modern and updated” shows that 100% are strongly agreed. The graph for “The instructor arrives on time” shows that 100% are strongly agreed. The graph for “The instructor communicates the subject matter effectively.” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

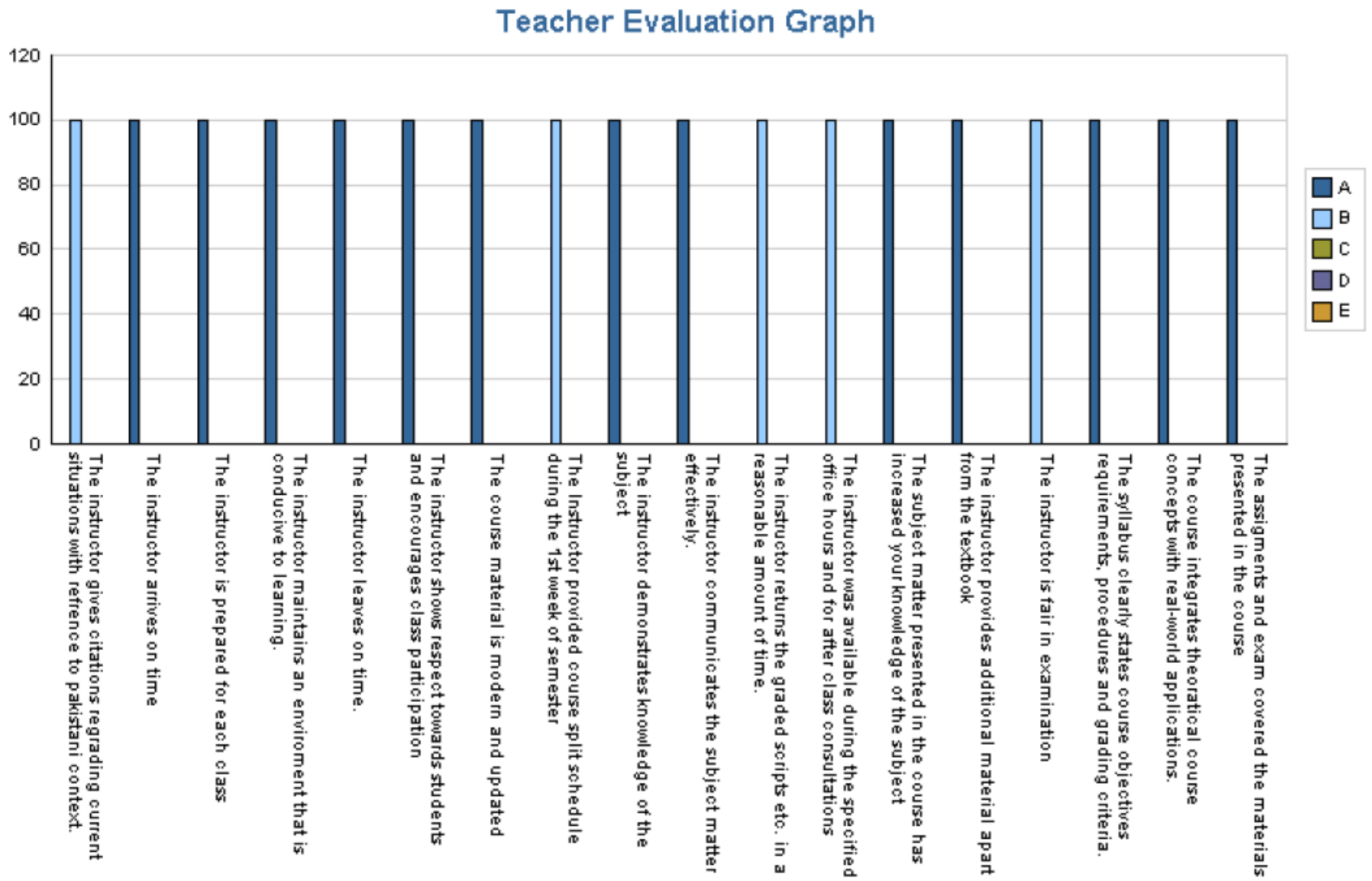

Figure 1.6: Teacher Evaluation Graph of Dr. Javaid Iqbal

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

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-1.6. The Software Quality Assurance has score 87%, Advanced Operating Systems has score 100%, the Adv. Research Methods has score 100%, Wireless Networks has scored 100%, Data Mining scored 84, Information Retrieval 88%, Special Topics in CS 92% and Network Security has scored 89%.

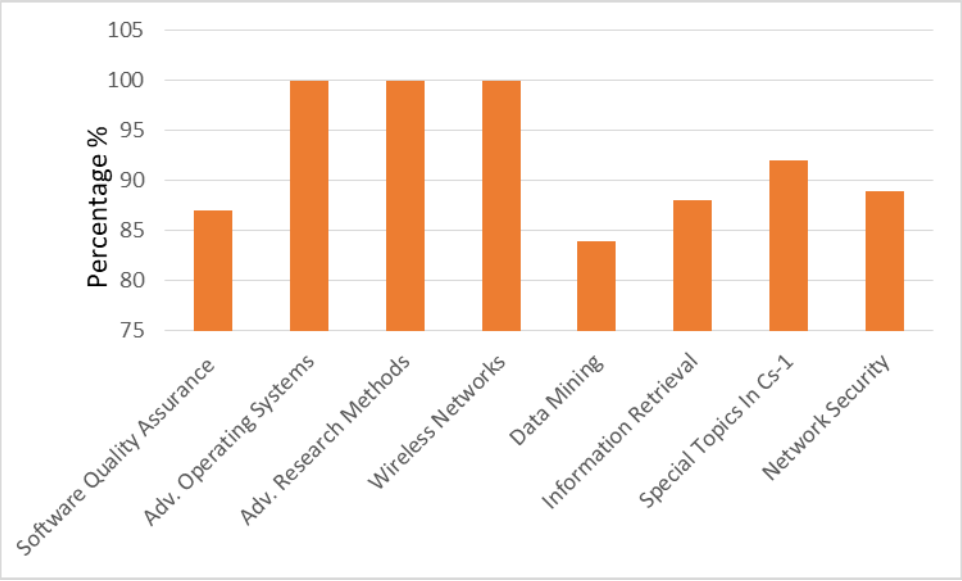

Figure 1.6: Student Course Evaluation Graph

Software Quality Assurance (Dr. Yaser Hafeez)

In Figure 1.7, the graph for “level of your own attendence during the whole course” shows that 100% are agreed on that. The graph for “Class rooms were Satisfactory” shows that 100% are uncertain on it. The graph for “Feedback on assessment was helpful” shows that 0% are strongly agreed, 0% are agreed and 100% are uncertain. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- Student actively participated in the course.

Weaknesses:

- The students were uncertain about classroom and the course structure

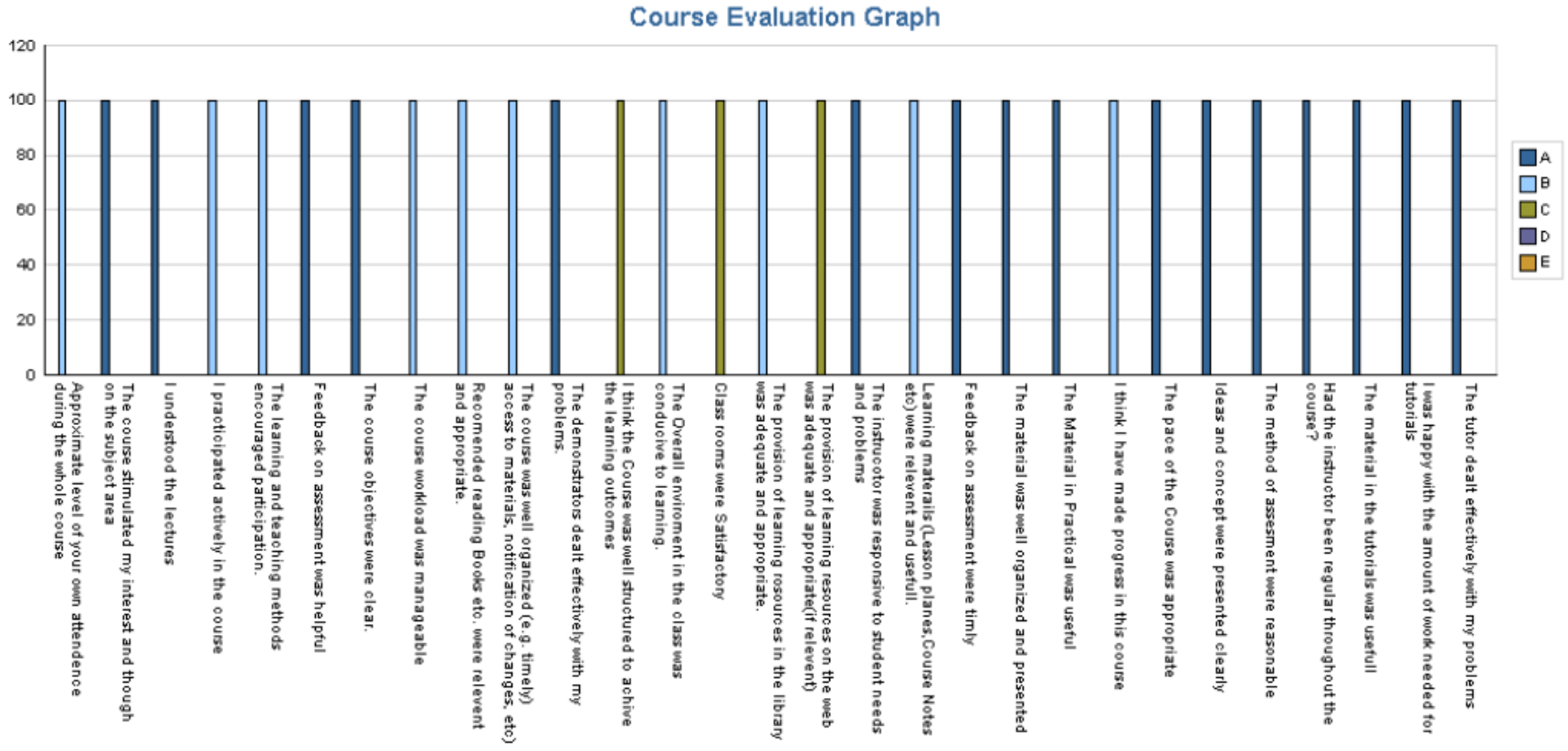

Figure 1.7: Course Evaluation Graph of Software Quality Assurance

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Advanced Operating System (Dr. Saleem Iqbal)

In Figure 1.8, the graph for “level of your own attendence during the whole course” shows that 100% are agreed. The graph for “Class rooms were Satisfactory” shows that 100% are agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are agreed. The graph for “ I practicipated actively in the course” shows that 100% are agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

Weaknesses:

- Feedbacks over assessments were not helpful.
- The level of attendance was just satisfactory.

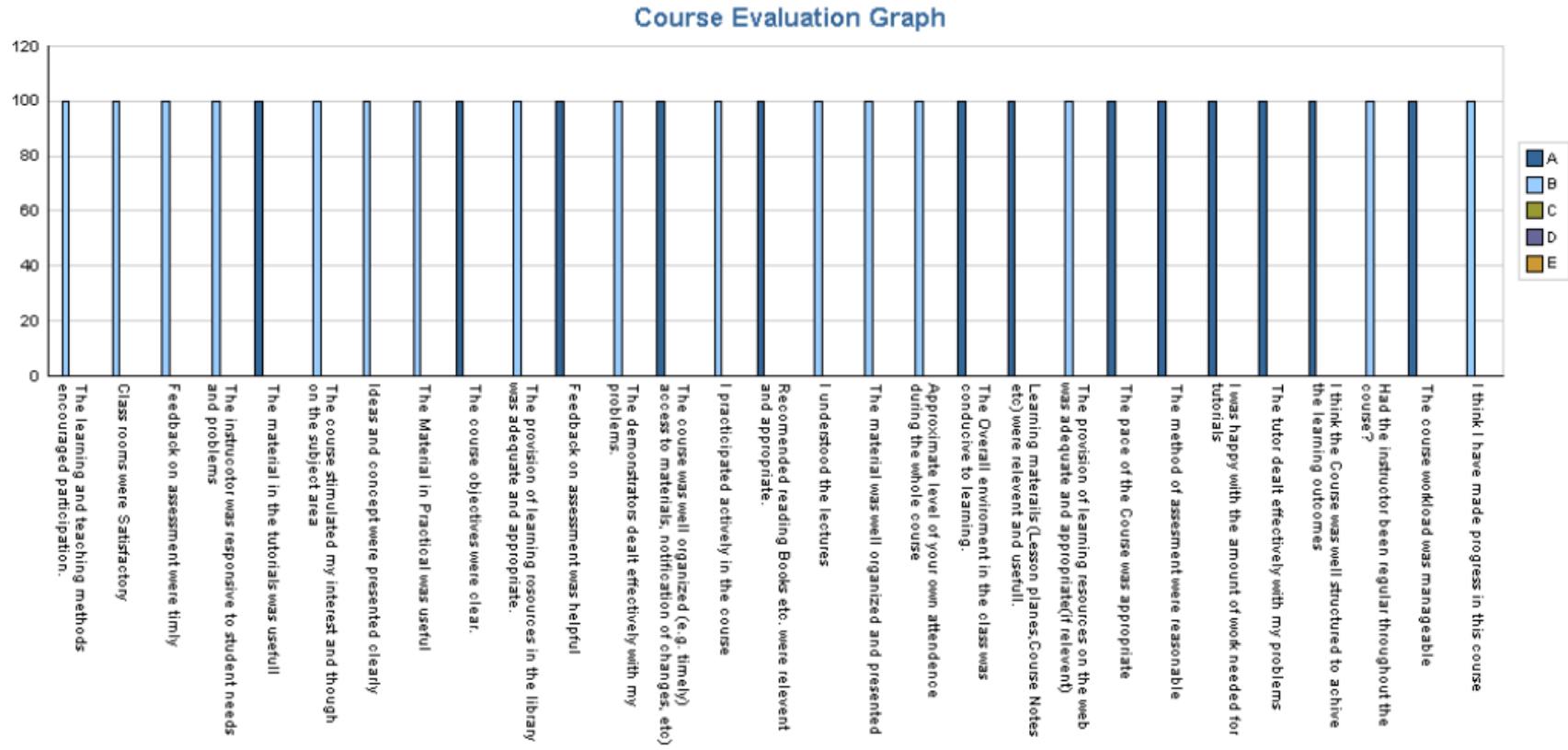

Figure 1.8: Course Evaluation Graph of Advanced Operating System

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Advanced Research Methodology (Dr. Muhammad Azeem Abbas)

In Figure 1.9, the graph for “level of your own attendence during the whole course” shows that 65% are strongly agreed, 35% are agreed. The graph for “Class rooms were Satisfactory” shows that 65% are strongly agreed, 35% are agreed. The graph for “Feedback on assessment was helpful” shows that 35% are strongly agreed, 65% are agreed. The graph for “Course Feedback on assessment were timly” shows that 65% are strongly agreed, 35% are agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- Course Workload was manageable.
- Students have made good progress in this course.

Weaknesses:

- Learning resources on web was not appropriate and adequate
- Feedback on assessment was not quit helpful

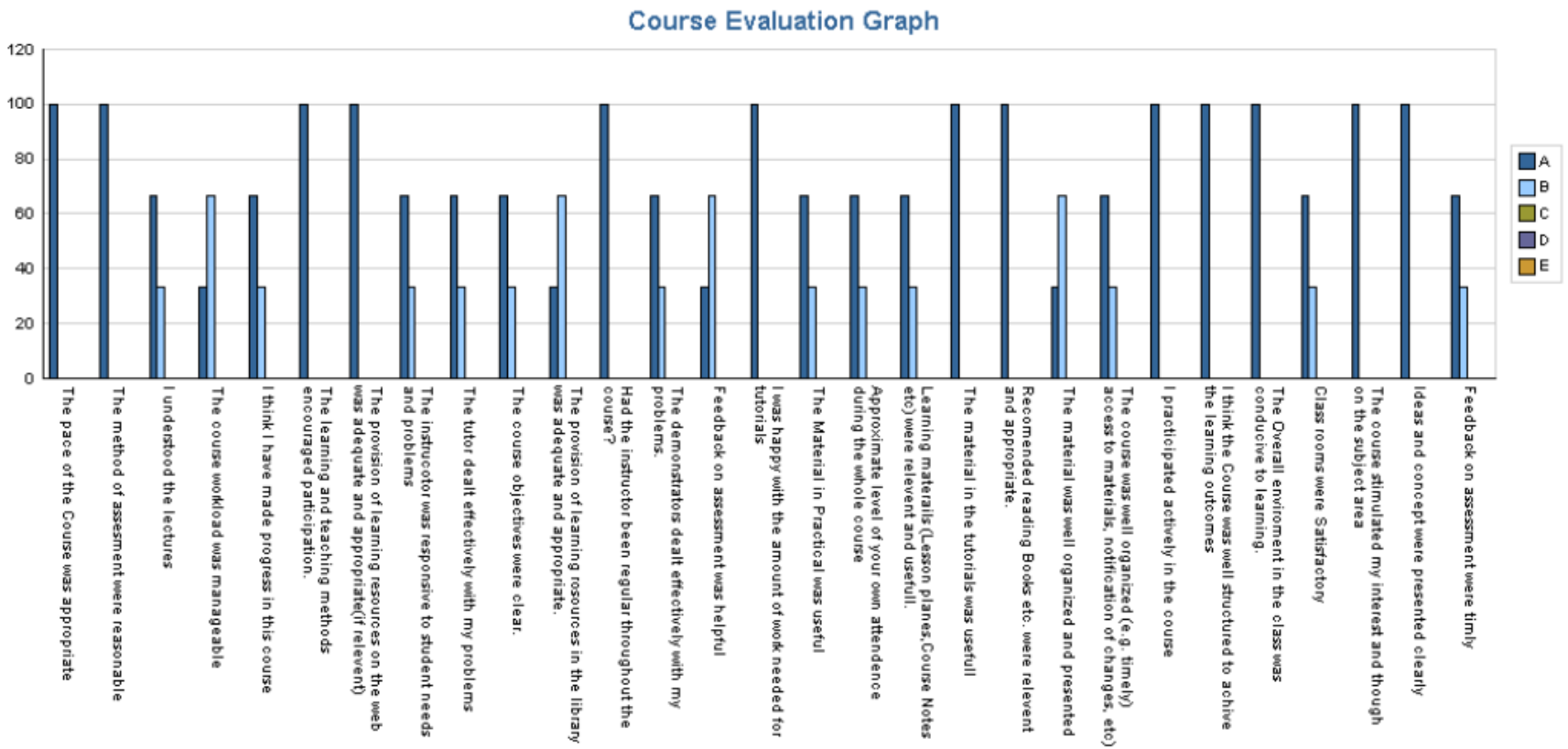

Figure 1.9: Course Evaluation Graph of Software Engineering Processes

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Wireless Networks (Dr. Saud Altad)

In Figure 1.10, the graph for “level of your own attendence during the whole course” shows that 100% are strongly agreed. The graph for “Class rooms were Satisfactory” shows that 100% are strongly agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

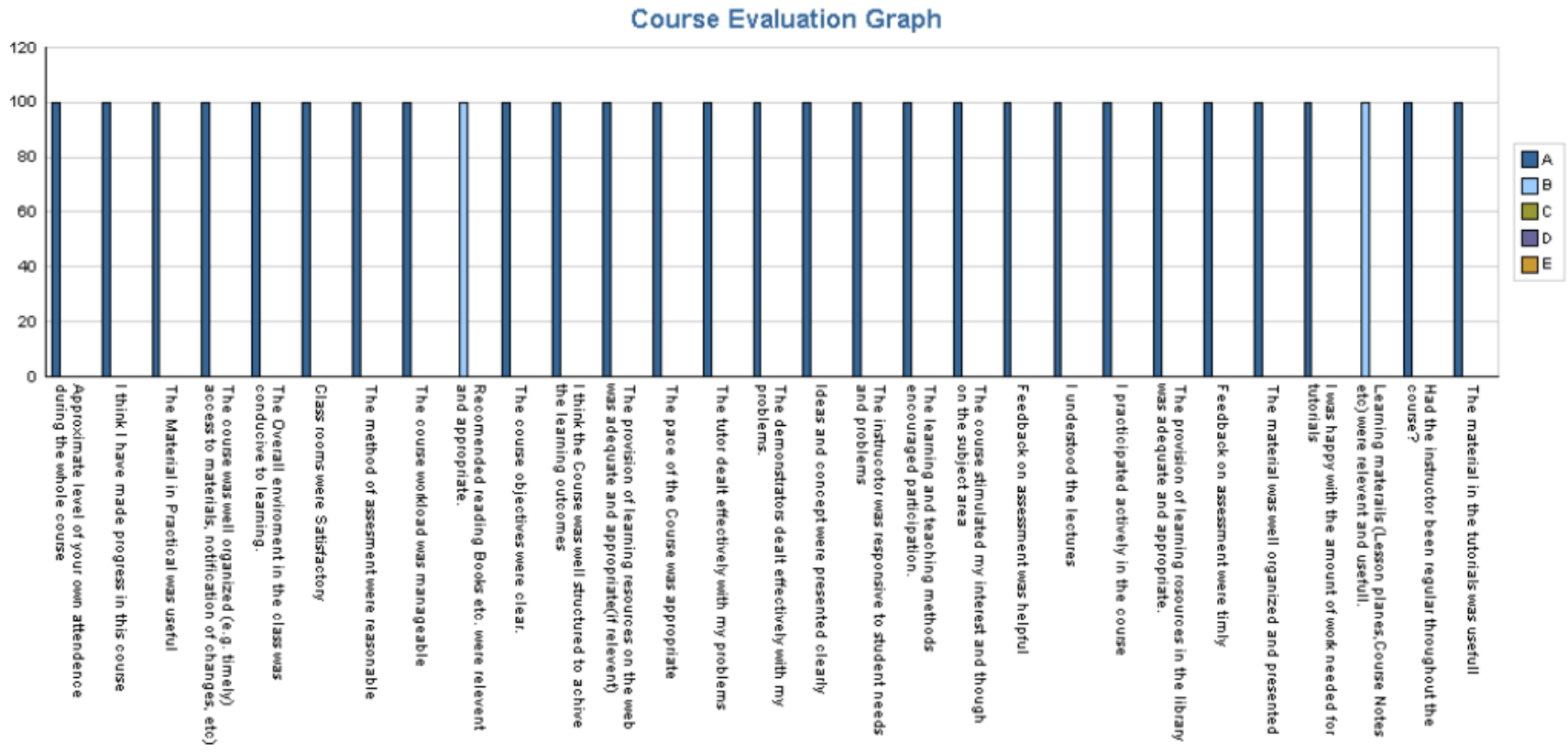

Figure 1.10: Course Evaluation Graph of Wireless Networks

* The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree; E= Strongly Disagree

Data Mining (Dr. Javaid Iqbal)

In Figure 1.12, the graph for “level of your own attendence during the whole course” shows that 100% are strongly agreed. The graph for “Class rooms were Satisfactory” shows that 100% are strongly agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

Weakness:

- Students were not punctual

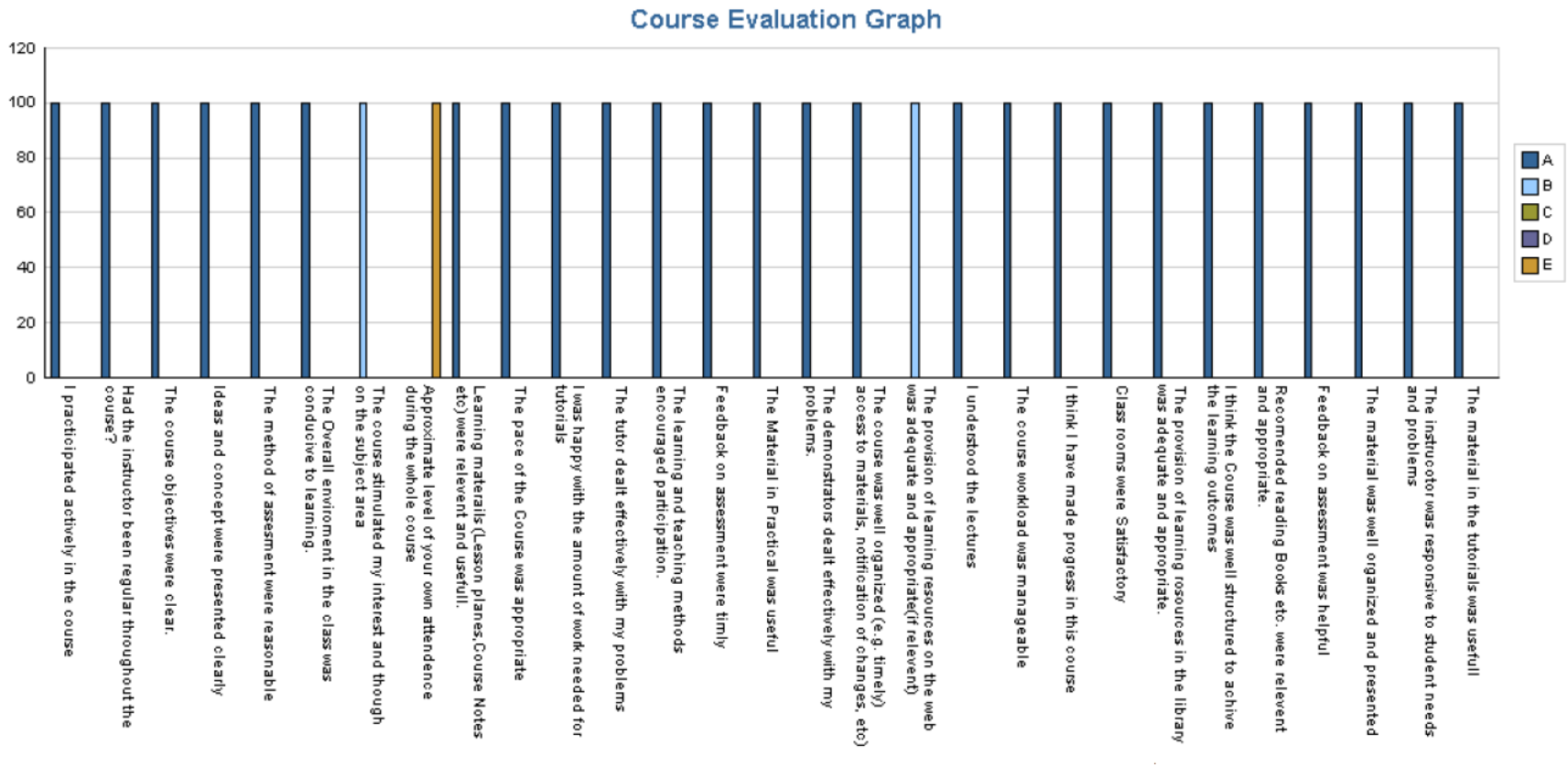

Figure 1.12: Course Evaluation Graph of Wireless Networks

*** The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree**

Information Retrieval (Dr. Azeem Abbas)

In Figure 1.13, the graph for “level of your own attendence during the whole course” shows that 100% are strongly disagreed. The graph for “Class rooms were Satisfactory” shows that 100% are agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

Weakness:

- Students were not punctual.

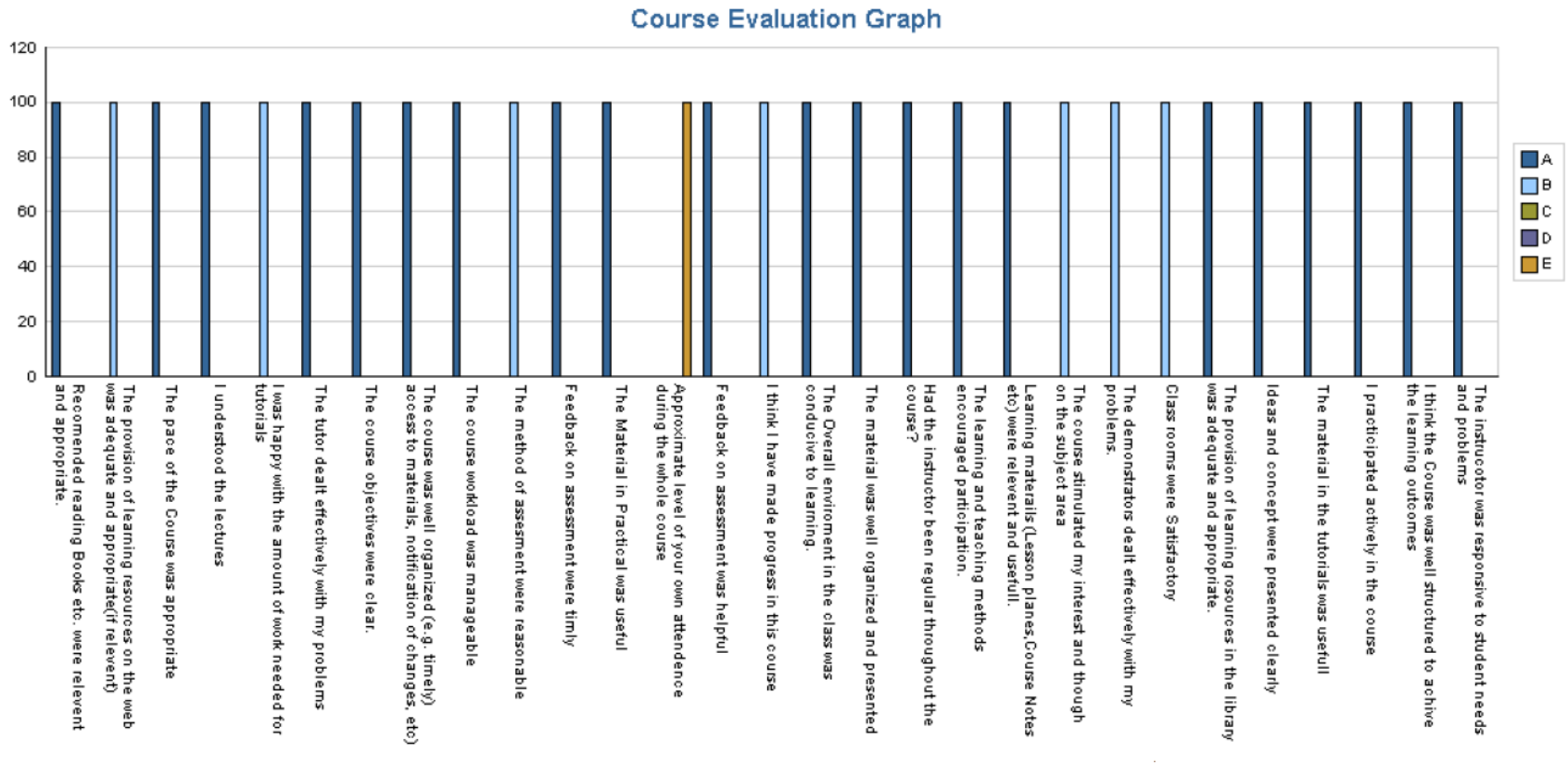

Figure 1.13: Course Evaluation Graph of Wireless Networks

*** The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree**

Special Topics in AI (Dr. Yaser Hafeez)

In Figure 1.14, the graph for “level of your own attendence during the whole course” shows that 100% are strongly agreed. The graph for “Class rooms were Satisfactory” shows that 100% are strongly agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

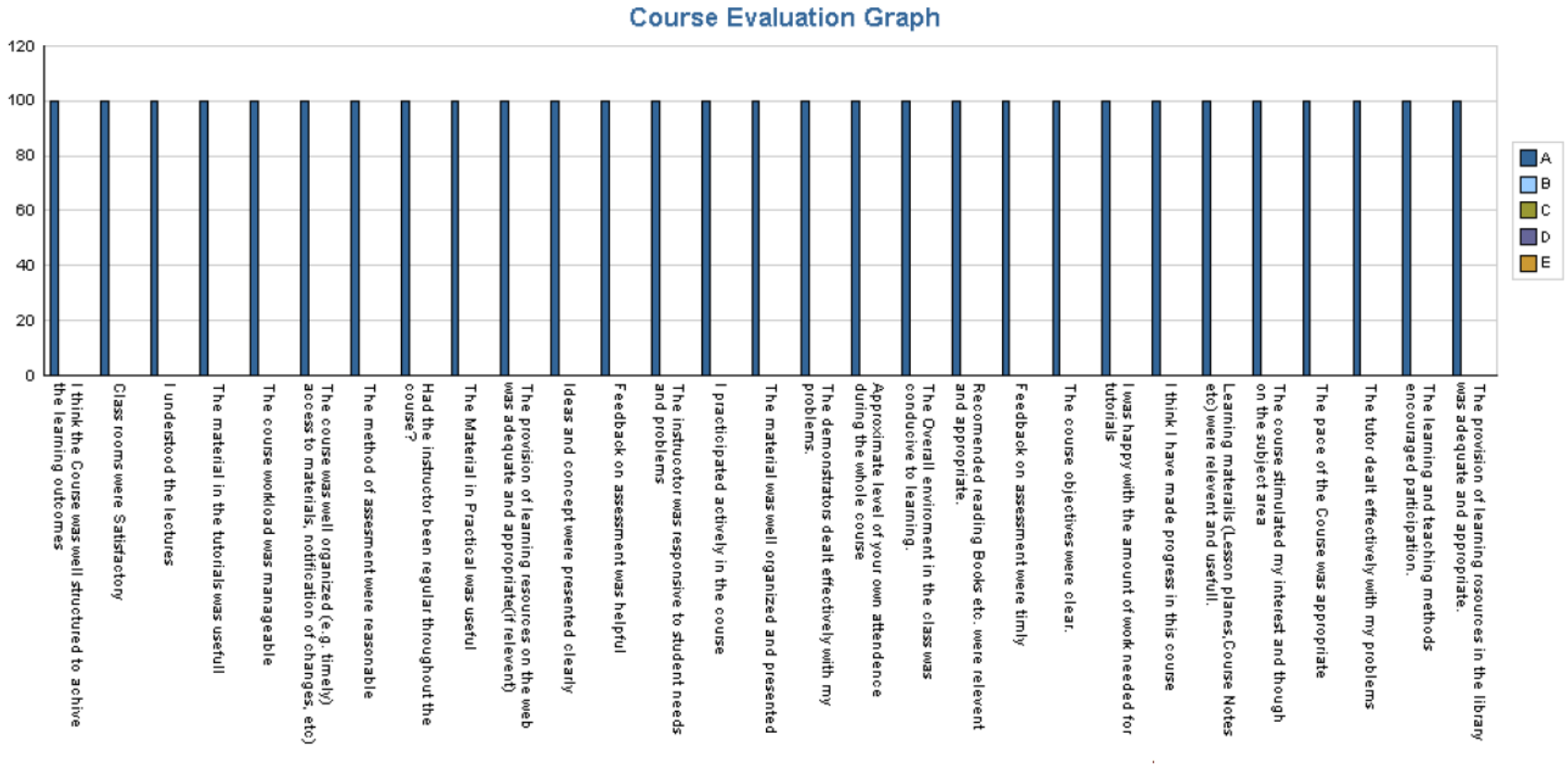

Figure 1.14: Course Evaluation Graph of Wireless Networks

*** The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree**

Network Security (Dr. Saleem Iqbal)

In Figure 1.15, the graph for “level of your own attendence during the whole course” shows that 100% are strongly agreed. The graph for “Class rooms were Satisfactory” shows that 100% are strongly agreed. The graph for “Feedback on assessment was helpful” shows that 100% are strongly agreed. The graph for “Course Feedback on assessment were timly” shows that 100% are strongly agreed. The graph for “Had the instructor been regular throughout the course?” shows that 100% are strongly agreed. The graph for “I practicipated actively in the course” shows that 100% are strongly agreed.

General Comments of the Students about this Course

Strengths:

- The objectives were clear.
- The material in the tutorials was useful.

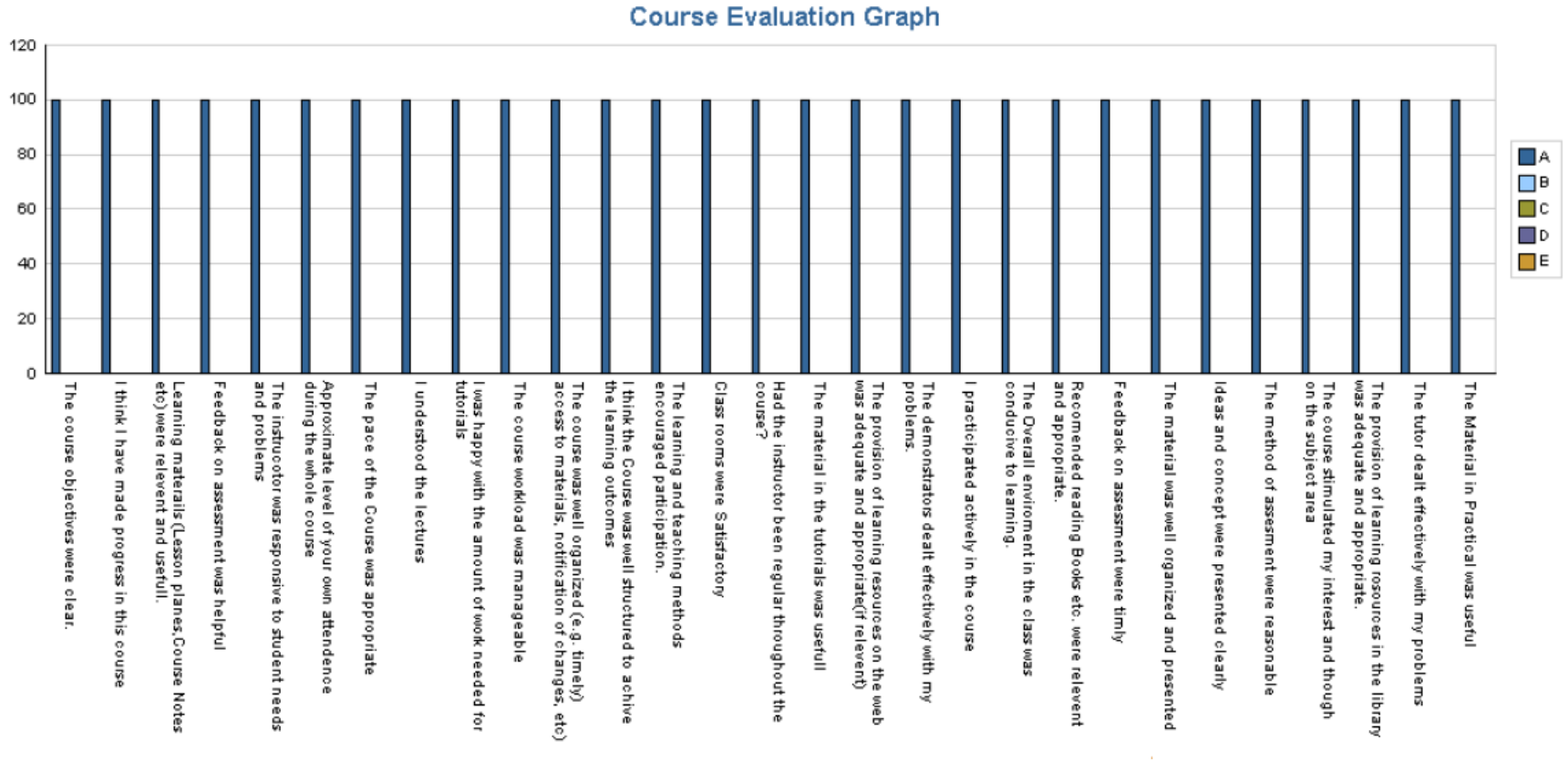

Figure 1.15: Course Evaluation Graph of Wireless Networks

*** The labels represents the scale: A= Strongly Agree; B= Agree; C= Neutral; D= Disagree**

Survey of PhD Students

A survey is conducted for the PhD students and feedback is collected on Performa 3. The results are summarized in Figure 1.11. A set of questions is present in the Performa 3. The graph from the summarized results shows that 55% students are very satisfied from the program, while 45% are satisfied.

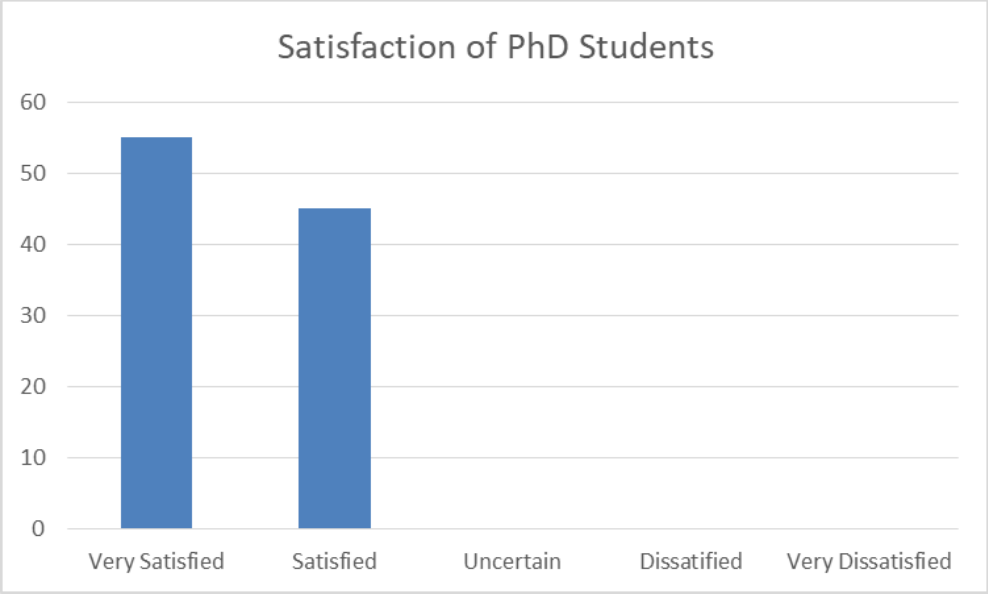

Figure 1.11: Survey of Graduating Students

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 equipments
- 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.

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.

Actions taken based on the results of periodic assessments.

The program is periodically assessed and accordingly different actions are taken such as:

- Rooms and Labs are renovated in order to provide better learning environment.
- Research oriented seminars are arranged.
- Separate lab for PhD students.

Major future program improvements

Based on recent assessments, it is planned to

- Increate the seminars on computer aided tools for all specializations of Computer science offered in UIIT.
- Students will be encouraged to publish their work in reputed journals.
- Separate specialized labs will be established.
- Labs needs to be equipped with latest computing hardware.

Strengths of Program/Institute

The course curriculum is well designed. The institute has hired new qualified faculty members to meet the needs of the students. The students are able to work within the teams. The environment is conducive for learning that's why there is an introduction of advanced technologies along with their tools and equipments to the students

Weakness of Program/Institute

The weaknesses in the program are that there should be less dependence on the visiting faculty. The course curriculum is designed very well, but still it needs to be updated in terms of specialization. More time should be given to the students for practical work independently of the timetable so that they can learn and implement the expressions easily. There should be some appropriate sitting place in the campus for students. Similarly, the concept of specialized lab should be introduced.

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

As the PhD program is a research oriented program, in recent past, the 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 doing joint projects with agriculture departments in order to develop IT oriented solutions to local farmers.

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 1.3 represents the Performance measures for research activities while Table 1.4 shows the Quantitative assessment of the department

Future Plans

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

Table 1.3: Performance measures for research activities

Sr. No.	Faculty	Publications in Journals	Publications in proceedings/abstracts	Research Projects
1	Mr. Ehtasham Azhar	22	4	-
2	Mr. Asif Nawaz	6	-	-
3	Mr. Azhar Manzoor	-	-	-
4	Dr. Saleem Iqbal	10	4	1
5	Dr. Kashif Sattar	4	-	
6	Mr. Rana Saqib Majeed	1	-	-
7	Mr. Tariq Ali	3	1	-
8	Ms. Farkhanda Qamar	-	-	-
9	Dr. Saud Altaf	7	-	-
10	Dr. Azeem Abbas	3	3	1
11	Ms. Bushra Hamid	1	-	-
12	Ms. Sidra Tahir	1	-	-
13	Dr. Yasir Hafeez	10	4	1
14	Mr. Ghulam Mustafa	2	-	-
15	Mr. Saif-ur-Rehman	4	4	-
16	Ms. Sarfaraz Bibi	1	1	-
	Total:	**75**	**21**	**03**

Table 1.4: Quantitative assessment of the department

Sr. #	Particular	No.	Remarks
ii	Ph.D. degree awarded	-	--
iv	Students: Faculty ratio	1:2	
V	Technical: Non-technical Ratio	-	Fulfils HEC criteria

CRITERION 2: CURRICULUM DESIGN AND ORGANIZATION

Degree Title: PhD 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 comprised 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.

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.

Degree plan

Presently Six degree programs are organized by the University Institute of Information Technology. The PhD degree program consists of 3 academic years/ 6 semesters.

There are total 6 courses, 2 seminars and 1 research thesis of 70 credit hours in total as below:

Core (2/70)	2 Seminars
Specialization Courses (18/70)	6 Courses
Research (50/70)	1 Thesis

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

The table (2.1) given below shows the list of courses those are consistent with the programs objectives.

Table 2.1: Curriculum course requirements

Semester	Specialization Courses	Core	
		Seminars	Thesis
1	3		
2	3		
3		1	1
4		1	1
5			1
6			1
Total	6 (18 Cr.)	2 (2 Cr.)	1 (50 Cr.)
Minimum Requirements	70 Cr.		

Table 2.2 shows the Courses versus their Objectives

Table 2.2: Courses versus Objectives

Courses			Objectives				
			1	**2**	**3**	**4**	**5**
Core		CS-720, CS-799	+++	+++	+++	+++	+++
Specialization	Software Engineering	CS-726, CS-728, CS-731, CS-732, CS-734, CS-736, CS-738, CS-739, CS-741, CS-742, CS-743, CS-744, CS-746, CS-747, CS-748	++	++	++	++	++
	Networks & Communication	CS- 750, CS- 751, CS- 752, CS- 753, CS- 754, CS-755, CS- 756,	++	++	++	++	++
	Artificial intelligence/ Data Mining/Image processing/Computer Graphics	CS- 757, CS- 758, CS- 759, CS- 760, CS- 761, CS-762, CS- 764, CS- 765, CS- 766, CS- 767, CS-768, CS- 769, CS- 770, CS- 775	++	++	++	++	++
	Database Systems	CS- 776, CS- 777, CS- 778, CS- 779, CS- 780	++	++	++	++	++

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

Assessment of PhD Curriculum

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

- It contains the Core Computer Science course, Computer Science Education and General Computer Science Electives.
- It contains specialization courses which help in getting expertise in specific fields of computer science.

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 plays vital role in building theoretical background, problem analysis and designing a solution.

Table 2.3: Standard 2-2 Requirement

Element	Course Code	Course Title
Theoretical Background	CS-799	PhD Thesis
		Specialization Courses
Problem Analysis	CS-720	Seminar- I
	CS-799	PhD Thesis
		Specialization Courses
Solution Design	CS-720	Seminar- II
	CS-799	PhD Thesis
		Specialization Courses

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

The curriculum is designed according to the requirements of the HEC 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, the respective accreditation body / councils. the respective accreditation body.

The institute has its own faculty board comprising of ten members, one member from sister institutes, two members from the academic council of PMAS-AAUR and seven members from faculty of UIIT. All courses of PhD 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, professional and other discipline requirements for the program, as specified by the respective accreditation body / councils.

The course distribution in the curriculum of PhD is according to the requirements of Accreditation Council of Pakistan and HEC.

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

The degree of PhD is a computer science professional degree. The extensive programming and application courses are included in the degree. It includes major Computer Science, Software Engineering, Computer Networks, Data Mining and Artificial Intelligence courses.

Table 2.4: Credit Hour Division between major areas

Category		Credit Hours	Cumulative Credit Hours
PhD Specialization Courses		18	18
Core Thesis	Thesis	50	52
	Seminars	2	
Total Credit Hours			70

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 ensures Presentations in all their courses, seminars and thesis.

Table 2.5: Communication skills enhancement courses

Course Code	Course Title
CS-720	Seminar I
CS-720	Seminar II
CS-799	PhD Thesis
	Specialization Courses

CRITERION 3: LABORATORIES AND COMPUTING FACILITIES

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.

These manuals are also made them available in soft form, for this purpose, dedicated server is placed in server room that is accessible through our lab computers.

In addition, depending upon the ease of teachers and students, sometimes free cloud based services are also used to share these manuals and documents. This permits the students to access these download at their homes.

Standard-3.2: There must be support personal for instruction and maintaining the laboratories.

There are enough number of people to support students and maintaining the laboratories. Detail is given below:

Computer Lab support staff:	10
Multimedia Projector Count:	0
Over Head Projectors Count:	20
Total Lab Computers:	180
Total No. of Labs:	8

E-learning Facility: Video Conferencing, Digital Library

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 180 in 8 labs. These all labs computers are equipped with state of art network and internet services (both wired and wireless), printing facilities, data backup facility for students, Software and lecture sharing system. A student to computer ratio maintained in the year 2016-2018 is 4:1. The detailed information is presented in table 3.1.

Table 3.1: 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 – 8:20 pm								
Nature and level of networking	Fiber Optic based Campus Wide LAN, Point to Point connectivity using fiber optic with 155MB of bandwidth.								
Specialized lab facilities and hours of their availability	CISCO (Router/Switch) GIS (Plotter/Scanner) DLD(Trainer/Oscillosc ope), PhD Lab (1)		Linux Lab Teaching Lab Project Lab The labs are open almost the whole day from 8:00 am to 8:20 pm						
Student-to-computer ratio	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	1.3:1 383:285	1.2:1 390:285	2:1 410:285	2:1 410:285	3:1 457:156	3.5:1 700:170	4:1 800:210	4:1 800:210	4:1 800:210
Avg lifetime of PC in computing labs	3 to 4 years								
Library information	Area (sq ft)	Automated	Total Books	Total Computer Books	Total Journals	IEEE ACM			
	1020	Yes	3604 In addition to university main library resources	2700	8 Journals	UIIT has an access to digital library services being extended by HEC			

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.

- 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 PhD 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 4.1: Student to Teacher Ratio at UIIT for PhD

2012-13	2013-14	2014-15	2015-16	2016-2018
1:1	1:1	1:1	1:1	1:2

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 news papers by the Registrar office.
- A person holding MS Degree (CS/IT) with first division or with at least a CGPA of 3.00 out 4.00
- Must have passed university entrance test with 70% marks.
- Admission will be on open merit basis

Standard-5.2: The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented. 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.

Standard-5.3: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, 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.
- 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 member because of attractive salaries in other universities.
- 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.

Standard 5-4: 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 in the staff meetings.

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

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, technical presentations and comprehensive examination. For PhD, the minimum pass marks for each course is 40%.

CRITERION 6: FACULTY

Standard 6-1: There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas/courses with continuity and stability. The 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.

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

A. Full-time Faculty Information

Table 6.1: Full Time Faculty Members at UIIT for PhD

Full-time Faculty Size	Number of faculty members with PhD	Full Professors	Associate Professors	Assistant Professors	Lecturers	Teaching Assistants/Fellows
18	7	0	0	9	9	0

B. Part-time Faculty Information

Table 6.2: Part Time Faculty Members at UIIT for PhD

Part-time Faculty Size	Number of Part-Time Faculty Members with PhD	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
2	2	10	3	1:1

The university grants the degree as generic PhD (Computer Science). However, later on the students are offered different streams of computer science. So there is no distribution of faculty in PhD with respect to specialization.

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

- Time to time in house trainings for the faculty members are arranged, Furthermore, wherever possible the faculty members are also sent for trainings locally as well as internationally. Currently many faculty members are studying in Pakistan and abroad in PhD level studies.
- The institute provides them study leave with pay and some time 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.

Standard 6-3: 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 environment of the institute. Not all the faculty members are satisfied with the job security. 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 6.3 Result of Faculty Survey)

Table 6.3: Faculty Survey

S. No	Parameters	Dr. Mamoona Humayoun	Dr. Saud Altaf	Dr. Yasir Hafeez	Dr. M. Azeem Abbas	Dr. Saleeem Iqbal
1	Your mix of research, teaching and community service	B	B	B	B	B
2	The intellectual stimulations of your work.	B	B	B	A	B
3	Type of teaching /research you currently do.	B	B	B	B	B
4	Your interaction with students.	C	B	B	B	B
5	Cooperation you receive form colleagues.	B	B	B	A	C
6	The mentoring available to you.	B	C	B	B	B
7	Administrative support from the department.	B	B	C	B	B
8	Providing clarity about	C	B	C	C	D

	the faculty promotion process.					
9	Your prospects for advancement and progress through ranks.	C	B	C	B	C
10	Salary and compensation package.	C	B	C	B	B
11	Job security and stability at the department.	C	B	B	B	B
12	Amount of time you have for yourself and family.	C	B	B	C	B
13	The over all climate at the department.	B	B	B	B	B
14	Whether the department is utilizing your experience and knowledge	C	B	C	B	B
15	What are the best programs / facts	The PhD Program Program	New Building, Latest Equipment	PhD Program	Colleagues are well qualified and	NIL

	currently available in your department that enhance you motivation and job satisfaction				interact to have joint publications	
16	Suggest programs/factors that could improve your motivation and job satisfaction?	It is better to offer new courses in the existing programs	Research Environment should be improved	Promotion of Research culture to give faculty a chance for improving research.	The workload of the faculty should be –re-considered	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 an under

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 journal 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.

Standard- 7.3: 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 conditions.

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.

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

The institute currently has limited resources for the research. There should be enough research budgets that can attract the faculty member to do research in their fields. Along with the research grant, the institute should provide funding for the research projects independently.

Standard 8-2: 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 PhD program over past ten years. UIIT is not accredited for a PhD Degree. Teaching Assistant positions are not available for UIIT.

Table 8.1: Number of students enrolled in PhD in last ten years

2012-14	2014-16	2016-2018
3	3	11

Standard- 8.3: 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 8.2: 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					
	2013-14	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Yearly budget for the past five years	54299318	62022461	71557530 (Estimated)	74037914	78952610
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	100,000	100,000	100,000	100,000	100,000
Institution's yearly budget for computing facilities	2450000	25,00,000	100,00,000	100,00,000	100,00,000
Total working capital of the department/school/ college that offers the program					
	2013-14	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Yearly budget of the department/school/ college that offers the program	**As Above**				

Department/school/ college's yearly budget for research and faculty development for the past five years					
Fee Structure	Regular Fee: Rs. 51,400	Regular Fee Rs. 60200	Regular Fee Rs. 60800	Regular Fee Rs. 62910	Regular Fee Rs. 62910
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 PhD provides an evaluation of the performance against out stated criteria. This report begins with an introduction of the institute followed by a detailed discussion of the PhD degree program including its importance, the main features, objective, outcomes and measures to assess those objectives.

PhD is a Three years degree program, during which a variety of relevant computer science courses are offered to the students. To give the students industry exposure regarding latest happenings and because of the large number of offered courses, Industry experienced visiting faculty is also engaged to work in collaboration with the full-time faculty members. In order to maintain and promote an outstanding quality of education, a continued assessment of the teaching and courses is conduced, throughout a semester, in accordance with the rules and regulations of the HEC.

The core of the curriculum designed for PhD program is according to the market and international standards of computer education guided by the requirements set by the Higher Education Commission of Pakistan. The curriculum includes an adequate proportion of core and specialized courses. Moreover, the faculty members and students are encouraged to arrange workshops and seminars as a part of their academic and practical work to further enhance their professional abilities.

UIIT supports the new trends towards education such as e-learning including digital publications, journals, etc. The faculty and students have been provided with a full-time access to the e-library and internet through local area network, so that they have a ready access to many well known journals relevant to their respective research areas. In addition, a book library is also available but lacks the latest editions of books related to multiple important subjects.

The performance of UIIT can be improved in general and particularly in PhD Degree program by improving following points:

1. The job satisfaction level of faculty members should be increased as according to the market trend.

2. Sufficient funding is required for the research projects for the development and betterment of the students.
3. There should be seminars on the latest research trends which help students to choose their field and also to decide the field of specialization for further studies.
4. Student internship program should be organized for the professional grooming and stipend should be given to them like other universities are practicing.
5. The workload should be reduced for the faculty according to the standard practice among other leading universities of Pakistan.
6. For the smooth flow of lectures, power supply for labs, class rooms and lecture theaters should be non-stop.
7. Concept of research associates needs to be reintroduced while at the same time, teaching assistants need to be inducted among the students to facilitate teachers and sharpen their own skills.
8. The trend of seminars and workshops, by the people of industry related to latest technologies currently active in the market, should be stimulated.

Program Team Member

Coordinator: Dr. Yaser Hafeez _____

Convener: Dr. Ghulam Mustafa _____

Members: Dr. Saleem Iqbal _____

Dr. Saud Altaf _____

ANNEXURE I: FACULTY RESUME

Performa 9

Faculty Resume

Name	**Dr.Yaser Hafeez**
Personal	Assistant 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 req., Req. 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	1. G. Mustafa, M.A. Abbas, Y. Hafeez, S. Khan, & G-J Hwang(2018), "Effectiveness of ontology-based learning content generation for preschool cognitive skills learning". Interactive Learning Environments, On line: 18 June (2018). 2. S. Ali, & Y. Hafeez (2018), "Towards Requirement Change

	Management for Global Software Development using Case Base Reasoning" Mehran University Research Journal of Engineering & Technology, Jamshoro, Pakistan, Volume: 37, No. 3,PP: 639-652 July 2018,P-ISSN:0254-7821, e-ISSN: 2413-7219, DOI: 10.22581/muet1982.1803.(HEC Recognized Category X). 3. M. Mukhtar & Y. Hafeez,(2017), "Integration of Requirement Engineering and Artificial Intelligence: Agile Practices and Case Based Reasoning" Journal of Computer Science & Systems Biology, Volume: 02 Issue: 03. 4. W. Ahmed, Y. Hafeez & G. Chiurleaand, (2017) "Towards Capturing Security Requirements in Agile Software Development" The Nucleus: Pakistan Institute of Nuclear Science and Technology. 5. Y. Hafeez, S. Asghar, A. Ahmad & A. Hussain (2016), "A Taxonomy to Support Team Coordination in Global Software Engineering Environment" Journal of Computational and Theoretical Nanoscience, Volume: 13, No. 5, PP: 3238–3247, 2016, 6. M. Ali, Y. Hafeez Motla & B. Hamid (2016), "An Empirical Study and a Framework for Effective Risk Management in Scrum". Proceedings of the Pakistan Academy of Sciences, Physical and Computational Sciences. 7. S. Ali, M. Imran, Y. Hafeez, T.R. Abbasi, W. Haider, A. Salam," Improving Component Based Software Integration Testing Using Data Mining Technique" published in 2018 12th International Conference on Mathematics, Actuarial Science, Computer Science and Statistics. 8. S.H.M. Kazmi, Y. Hafeez & S. Ali, "Software Outsourcing Model for Risk Mitigation" 2018 International Conference on Computing, Mathematics and Engineering Technologies – iCoMET 2018. 9. A.Z. Chohan, Y. Hafeez Motla & A. Bibi, "Optimized Software Product Line Architecture and Feature Modeling In Improvement of SPL" 2017 International Conference on Frontiers of Information Technology. 10. K. Buskhtwar, M.S.I. Sameen & Y. Hafeez Motla, "A Model for Applying Agile Practices in Distributed Environment: A Case of Local Software Industry" 2017, International Conference on Communication, Computing and Digital Systems (CCODE 2017).

Performa 9

Faculty Resume

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 - To Date PMAS-AAUR (University Institute of Information Technology), Rawalpindi Assistant Director (Information Technology) Oct 2007 - Jun 2012 Cabinet Division, Islamabad Lecturer (Computer Science) 2003 - 2007 COMSATS, Islamabad
Honor and Awards	• Certificate of Excellence " PhD Thesis" • Merit thesis Award " For PhD thesis" • International Doctoral Fellowship " One year" • Appreciation for participation in 1st Pak 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 ▪ National Testing Service Contributor for MCQs in Question Bank of NTS

Brief Statement of Research Interest	• Computer Communication & Networks • Network Security and Simulations
Publications	**Journal Publications** 1. Saleem Iqbal, Abdul Hanan Abdullah, Kashif Naseer Qureshi (Nov 2017) Channel Quality and Utilization Metric for Interference Estimation in Wireless Mesh Networks. Computers and Electrical Engineering – Elsevier. Volume 64 Issue C, pp 420-435 (IF 1.570) DOI: 10.1016/j.compeleceng.2017.10.003 2. Saleem Iqbal, Abdul Hanan Abdullah, Faraz Ahsan, Kashif Naseer Qureshi (2017), Critical Link Identification and Prioritization using Bayesian Theorem for dynamic Channel Assignment in Wireless Mesh Networks. Wireless Networks – Springer. Volume 24, Issue 7, pp 2685–2697 (Oct 2018, IF: 1.584) DOI: 10.1007/s11276-017-1471-8 3. Saleem Iqbal, Abdul Hanan Abdullah, Kashif Naseer Qureshi, J Lloret (2018) Soft-GORA: Soft Constrained Globally Optimal Resource Allocation for Critical Links in IoT Backhaul Communication. IEEE Access vol 6, pp 614-624 (Available online 14 February 2018, Impact Factor 3.244) DOI: 10.1109/ACCESS.2017.2772867 4. Saleem Iqbal, Abdul Hanan Abdullah, Mohd Murtadha Mohamad, Kashif Naseer Qureshi, and Khalid Hussain (2016) Adaptive Interface Reconfiguration in Low-rate Mesh WPANs. Journal of Computational and Theoretical Nanoscience. Vol 13 No. 7 pp. 4703–4710 (Available online 1 July 2016, Impact Factor 1.5) DOI: http://dx.doi.org/10.1166/jctn.2016.5340 5. Kashif Naseer Qureshi, Abdul Hanan Abdullah, Saleem Iqbal, Zia Muhammad (2016). Improving quality of service through road side back-bone network in VANET Jurnal Teknologi, Vol. 78, No. 2, pp 7-14. DOI: http://dx.doi.org/10.11113/jt.v78.4315 6. Zafar Iqbal , Nadeem Javaid , Saleem Iqbal, Sheraz Aslam, Zahoor Ali Khan , Wadood Abdul , Ahmad Almogren and Atif Alamri, A Domestic Microgrid with Optimized Home Energy Management System, MDPI-Energies, 11(4), 1002-1042; ISSN: 1996-1073, https:10.3390/en11041002 (Impact Factor 2.676) 7. Kashif Naseer Qureshi, Abdul Hanan Abdullah, Omprakash Kaiwartya, Saleem Iqbal, Rizwan Aslam Butt, Faisal Bashir (2017) A Dynamic Congestion Control Scheme for safety applications in vehicular ad hoc networks. Computers and Electrical Engineering – Elsevier. (available online, Impact Factor 1.570) Volume 72, November 2018, Pages 774-788 https://www.sciencedirect.com/science/article/pii/S0045790616306656 8. Kashif Naseer Qureshi, Abdul Hanan Abdullah, Faisal Bashir, Saleem

	Iqbal, Khalid Mehmood Awan (2018) Cluster based Data Dissemination, Cluster Head Formation under Sparse and Dense Traffic Conditions for Vehicular Ad hoc Networks. International Journal of Communication Systems. Jan 2018 pp 1-16(Available online, Impact Factor: 1.066) 31(8) http://dx.doi.org/.1002/dac.3533 9. Kashif Naseer Qureshi, Abdul Hanan Abdullah, Omprakash Kaiwartya, Fasee Ullah, Saleem Iqbal, Ayman Altameem (2016) Weighted link quality and forward progress coupled with modified RTS/CTS for beaconless packet forwarding protocol (B-PFP) in VANETs, Telecommunication Systems – Springer Vol 63. pp. 1-16 (Impact Factor 0.822) DOI: 10.1007/s11235-016-0207-x **Conference/Workshop Publications** 1. Saleem Iqbal. (2017) Emerged Wireless Sensor Technologies and Monitoring Systems in Precision. Agriculture Field 4th International Workshop on 'Applications of ICTs in Education, Healthcare and Agriculture' (25-27 July 2017, Abuja, Nigeria) 2. Kashif Naseer Qureshi ; Faisal Bashir ; Saleem Iqbal, Cloud Computing Model for Vehicular Ad hoc Networks, IEEE 7th International Conference on Cloud Networking (CloudNet) 22-24 Oct. 2018, Tokyo, Japan. 10.1109/CloudNet.2018.8549536 NATIONAL PUBLICATIONS **Journal Publications** 1. Saqib Majeed, Saleem Iqbal, Adnan Ahmed, Kulsoom Azad, Kashif Sattar (2016) An Ontology-driven Vegetation Classification for Semantic based Image Retrieval of Arial Photography, QUEST Research Journal, 15 (2), 32 - 37 (HEC Y Category) 2. Raja W. Anwar, Anazida Zainal, Saleem Iqbal, Mahmood Bashir, "Key Security Challenges and Threats to Cyber-Physical Systems and Their Applications", QUEST RESEARCH JOURNAL, VOL. 16, NO. 1, 31–36, JUL-DEC 2018. **Conference/Workshop Publications** 1. Kashif Naseer Qureshi, Faisal Bashir, Saleem Iqbal, Raja Waseem Anwar, Systematic Study of Geographical Routing Protocols and Routing Challenges for Vehicular Ad hoc Networks, 13th International Conference on Emerging Technologies (ICET), 27-28 Dec. 2017. Islamabad, Pakistan DOI: 10.1109/ICET.2017.8281743

Performa 9

Faculty Resume

Name	**Dr. Saud Altaf**
Personal	Assistant Professor University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan Cell no 03420654786
Experience	Software Developer (1.5 years) Worked as Assistant Director (11 years) 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	1. 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) 2. 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. 3. 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, 21 th August 2016. 4. 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, 22 nd July 2016.

Performa 9

Faculty Resume

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	1. Mamoona Humayun and Cui Gang. "An Empirical Study on Improving Trust among GSD Teams Using KMR". 24th international conference on software engineering and knowledge engineering (SEKE), Redwood City, San Francisco Bay, CA, USA July 1-3, 2012. 2. Mamoona Humayun and Cui Gang. "An Empirical Study on Improving Shared Understanding of Requirements in GSD". International Journal of Software Engineering and Its Applications, Vol. 7, No. 1, January, 2013 ISSN: 1738-9984 3. Mamoona Humayun and Cui Gang. "Impact of Leadership Support on KMS-based Knowledge Seeking Behavior: Lessons Learned". Research Journal of applied science engineering and Technology. 5(1) November 2012. 4. Mamoona Humayun and Cui gang. "Exploring leadership role in GSD: potential contribution to an overall knowledge management strategy". Journal of computing, 5(3) March 2013, ISSN : 2151-9617 5. Mamoona Humayun and Cui Gang. "An Empirical Study of the Complex Relationship between KMR and Trust in GSD" Journal of Software" Vol 8 No 4, April 2013. 6. Mamoona Humayun and Cui Gang. "Investigating the Role of organizational Structure in Developing Shared understanding of

Requirements within GSD". 15th IEEE International MultiTopic conference (INMIC), Islamabad, Pakistan December 13-15, 2012.

7. Mamoona Humayun, Cui Gang and Isma Masood. "An empirical study on investigating the role of KMS in promoting trust within GSD teams". 17th international conference on evaluation and assessment in software engineering (EASE), Porto De Galinhas, Brazil April 14-16, 2013.

8. Mamoona Humayun and Cui Gang. "Imparting the Importance of Knowledge management in GSD". 4th south Asian international conference 2012, December 5-7, PC Bhurban Muree, Pakistan.

9. Mamoona Humayun and Cui Gang. "Estimating Effort in Global Software Development Projects Using Machine Learning Techniques," International Journal of Information and Education Technology vol. 2, no. 3, pp. 208-211, 2012. ISSN: 2010-3689.

Performa 9

Faculty Resume

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 Lecturer 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 theses honors showing:	02
Publications	1. A. Irshad, M. Shafiq, S. Khurram, M. Gilani, M. Shahzad, E. Irshad "An algorithm for strings generation for Regular Expression in a controlled manner" IEEE ICIIT, UCP Lahore, OCT 2010, ISBN: 978-1-4244-813 8-5, pp. VI-70-74 (Published) 2. A. Irshad, M. Gilani, S. Khurram, M. Shafiq, A. Wahab, M Usman "Hash-chain based peer-peer key management and establishment of Security Associations in MANETS" June 2010, IEEE ICIET FAST, Karachi, ISBN: 978-1-4244-8002-9, pp. (Published) 3. M. Gilani, J.Ahmed, M.A.Abbas, "A Paperless Model to Convert Universities Environment into Fully Automated System" 2009 The International Conference on Industrial globalization and Technology Innovation, China 4. M. Gilani, J.Ahmed, M.A.Abbas, "Electronic Document Management: A Paperless University Model" IEEE ICCSIT 2009, August 8 - 11, 2009, Beijing, China 5. M. Usman, W. Noshairwan, A. Irshad, E. Irshad, M.

Gilani "Seamless vertical handoff using Authentication Certificate in GPRS-WLAN tightly coupled integrated networks" OCT 2008, IEEE ICET, CEME NUST, Rawalpindi, ISBN: 978-1-4244-2210-4, pp. 199-204 (Published)

6. E. Irshad, W. Noshairwan, A. Irshad, M. Usman, M. Gilani "Group Mobility in Mobile Ad hoc Networks", ISBN: 978-972-8924-68-3, pp. 381-385, WWW/Internet, IADIS Germany.

Performa 9

Faculty Resume

Name	**Dr. Muhammad Azeem Abbas**
Personal	Assistant Professor University Institute of Information Technology PMAS-Arid Agriculture University, Rawalpindi - Pakistan
Experience	Assistant Professor (UIIT) Web Manager (NITSC, PMAS-AAUR) Software Developer (IRe-s, Islamabad)
Honor and Awards	Gold Medal in 33rd Science and Design Exhibition, Malaysia
Memberships	Member of Knowledge and Databases Research Group at SEECS
Brief Statement of Research Interest	Artificial Intelligence, Artificial Intelligence in Education, Machine Learning, Information Retrieval
Publications	1. Jilani, M. T., Rehman, M. Z. U., Khan, A. M., Chughtai, O., Abbas, M. A., & Khan, M. T. (2018). An implementation of IoT-based microwave sensing system for the evaluation of tissues moisture. Microelectronics Journal. [IF=1.322] https://doi.org/10.1016/j.mejo.2018.03.006 2. Shoaib, L., Khan, S., Abbas, M. A., & Salman, A. (2018). Enabling profound hearing impaired children to articulate words using lip-reading through software application. Journal of the Pakistan Medical Association, 68(3). [IF=0.8] 3. Khan, S. A., Qadir, M. A., Abbas, M. A., & Afzal, M. T. (2017). OWL2 benchmarking for the evaluation of knowledge based systems. PLoS ONE, 12(6). [IF=2.8] https://doi.org/10.1371/journal.pone.0179578 4. Sultana, S., Khan, S., & Abbas, M. A. (2017). Predicting performance of electrical engineering students using cognitive and non-cognitive features for identification of potential dropouts. International Journal of Electrical Engineering Education, 54(2), 105–118. [IF=0.593] **Conference** 5. Hafeez, R., Khan, S., Abbas, M. A., & Maqbool, F. (2018). Topic based Summarization of Multiple Documents using Semantic Analysis and Clustering. In 2018 15th International Conference on Smart Cities: Improving Quality of Life Using ICT IoT (HONET-ICT) (pp. 70–74). https://doi.org/10.1109/HONET.2018.8551325 6. 4. Hafeez, R., Khan, S., Khan, I. A., & Abbas, M. A. (2017). Does preprocessing really impact automatically generated taxonomy. In 2017 13th International Conference on Emerging Technologies (ICET) (pp. 1–6).

	7. 5. Hammad, S., Ahmed, S., Abbas, M. A., Abbasi, I., & Jillani, T. (2018). A Recommendation System using Interviewers Preferences for Ranked Candidate Selection. In 2018 International Conference on Frontiers of Information Technology (FIT) (pp. 230–234).

ANNEXURE II: 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-736	Title:	Software Quality Assurance		
Session:	2016	Semester:	Fall		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Yaser Hafeez	No. of Students Contact Hours	Labs (N/A)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc.)	Quizzes, Assignment, Mid Term, Final term 6 Quizez, 6 Assignment 1 mid, 1 final				

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

Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	1	0	100	0	0	0			

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)

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

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: _Dr. Yaser Hafeez_____ Date _____

(Course Instructor)

Name: __Dr. Yaser Hafeez__ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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	CS719	Title:	Advanced Operating Systems		
Session:	2016	Semester:	Fall		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Saleem Iqbal	No. of Students Contact Hours	Lectures (3hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)		Quizzes, Assignment, Lab Practicals, Mid Term, Final term			

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	1	100							

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: ___Dr. Saleem Iqbal_____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez_____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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-800	Title:	Adv. Research Methods		
Session:	2017	Semester:	Spring		
Credit Value:		Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Muhammad Azeem Abbas	No. of Students Contact Hours	5 Lectures (3 hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)	Quizzes, Assignment, Mid Term, Final term				

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	3	67		0	0	33			

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: Dr. Muhammad Azeem _____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez _____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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-752	Title:	Wireless Networks		
Session:	2017	Semester:	Fall		
Credit Value:	3	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Saud Altaf	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 At least 6 quizzes and 3 assignments				

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	4	100	0	0	0	0			

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: _Dr. Saud Altaf_____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez _____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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	CS765	Title:	Data Mining		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Javaid Iqbal	No. of Students Contact Hours	Lectures (3hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)		Quizzes, Assignment, Lab Practicals, Mid Term, Final term			

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	3	33.33	33.33	33.33					

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: ___Dr. Javaid Iqbal_____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez_____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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	CS802	Title:	Information Retrieval		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Muhammad Azeem	No. of Students Contact Hours	Lectures (3hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)	Quizzes, Assignment, Lab Practicals, Mid Term, Final term				

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	3	66.67				33.33			

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: ___Dr. Muhammad Azeem_____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez_____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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	CS795	Title:	Special Topics in CS		
Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Yaser Hafeez	No. of Students Contact Hours	Lectures (3hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)		Quizzes, Assignment, Lab Practicals, Mid Term, Final term			

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	2	50	50						

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: ___Dr. Yaser Hafeez_____ Date _____

(Course Instructor)

Name: _Dr. Yaser Hafeez_____ Date _____

(Director)

Performa 2

Faculty Course Review Report

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

For completion of 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	CS719	Title:	Network Security	

Session:	2018	Semester:	Spring		
Credit Value:	3(3-0)	Level:	PhD	Prerequisites:	
Name Of Course Instructor:	Dr. Saleem Iqbal	No. of Students Contact Hours	Lectures (3hours)		
Assessment Methods: Give precise details (no & length of assignments, exams weightings, etc)		Quizzes, Assignment, Lab Practicals, Mid Term, Final term			

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

Undergraduate	Originally	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	Total
No Of Students									
Post Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	No Grade	Withdrawal	**Total**
No. of Students	1	100							

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)

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

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 the structure of the Course that this semester/term's experience may prompt.

Name: Dr. Saleem Iqbal Date _____

(Course Instructor)

Name: Dr. Yaser Hafeez Date _____

(Director)