كلية الحوسبة والمعلوماتية

College of Computing and Informatics

الجامعة السعودية الإلكترونية
SAUDI ELECTRONIC UNIVERSITY
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Quality Assurance Manual for the Bachelor of Information Technology (IT) Program

Quality & Academic Accreditation Committee

College of Computing and Informatics

بسم الله الرحمن الرحيم

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INTRODUCTION

Quality assurance is considered the cornerstone of institutions that pursue continuous development, professional competitiveness, alignment to contemporary requirements, as well as leadership aspiration. The Saudi Electronic University works diligently to assure quality in all its operations. In fact, it strives to embed the quality culture into all University personnel with the intent of having quality assurance practices reflected in all day-to-day educational and administrative operations. As a culmination of the University's quality assurance efforts, that started since its inception, comes this Quality Assurance Guide, which is developed to complement these efforts through documenting and developing the existing practices to be in line with the prevailing bylaws, regulations and academic accreditation requirements. This Guide was developed taking into consideration international standards, particularly the principles of the Quality Assurance Agency for Higher Education (QAA) in the United Kingdom, as well as the requirements of The National Center for Academic Accreditation and Evaluation (NCCA) . Moreover, the Guide was developed to ensure ease of use through a concise, easy to follow, guide covering the most import elements of the practice, while referring to appendices containing detailed policies and procedures.

This guide is divided into two major units. The first is concerned with the academic side and the second with the administrative side. In addition, this guide has a multi-section appendix providing detailed information about what has been presented briefly in the main document.

TERMINOLOGY

Quality Assurance Guide
is a set of the necessary processes and regulations that are used to achieve the effective performance of the university in accordance with the application of policies and procedures that ensure the quality of all standards of The National Center for Academic Accreditation and Evaluation.

Study plan
Is the collection of courses that the student must pass in order to obtain a scientific degree in his/her major.

Course
Is the work unit accredited with certain academic results and course descriptions, in addition to the evaluation plan.

Program
Is a pattern of academic courses that lead to an academic qualification.

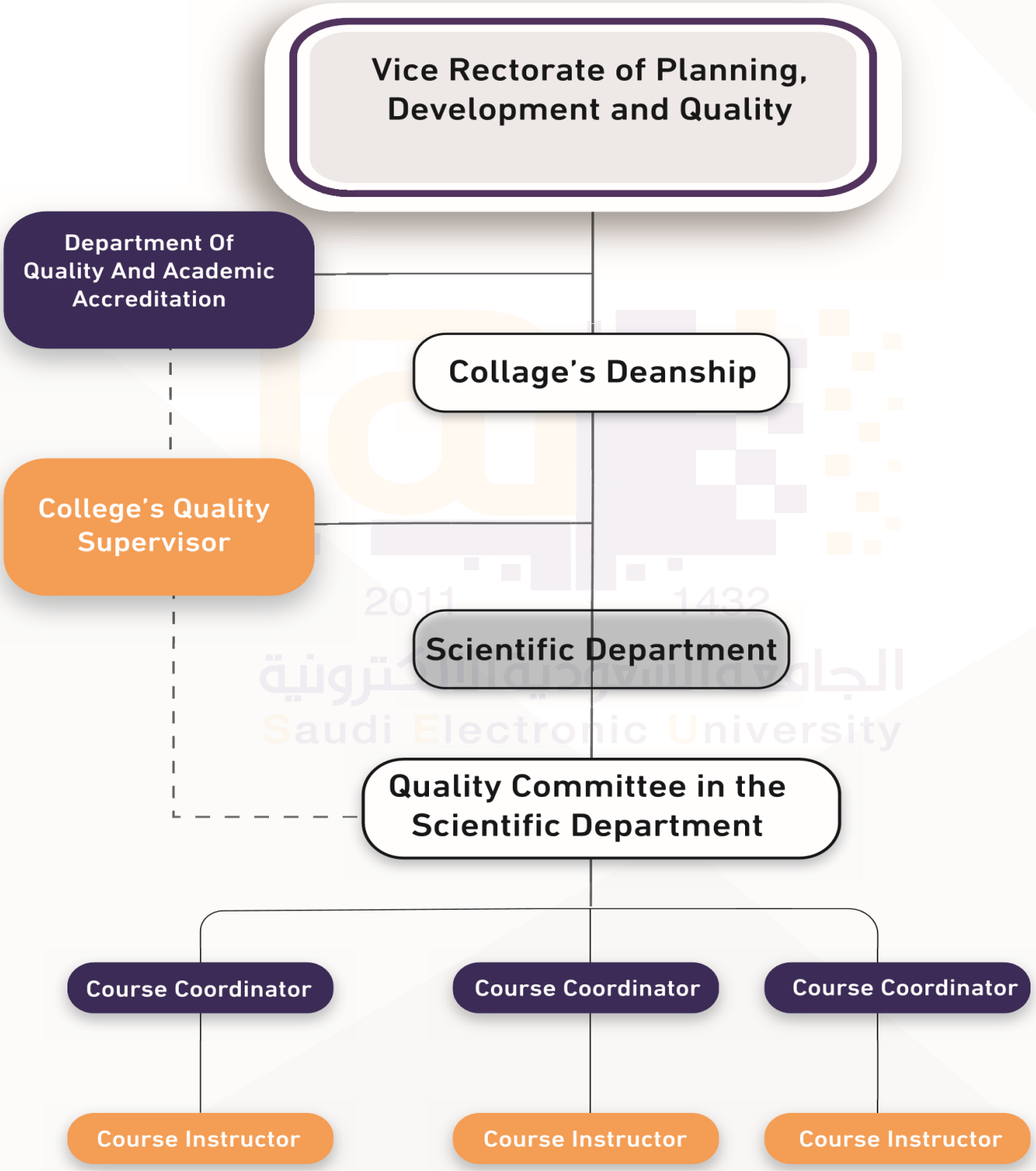
Academic Accreditation
A process conducted in accordance with arbitration and review mechanisms and that is administered by specialized authorities, to ensure the quality of education received by students in higher education institutions that wish to ensure compliance with quality standards.

Institutional Accreditation
It is concerned with evaluating the quality of work at the educational institution in terms of resources, procedures, and outputs according to specific criteria determined by local or international academic accreditation authorities.

Program Accreditation
It is concerned with evaluating the quality of a specific educational program for a specific time period, in accordance with the standards of the targeted academic accreditation authority.

Academic Accreditation References
are the bodies that determine the local standards and regulations of university educational practices. the authority accredited by the ministry of education is The National Center for Academic Accreditation and Evaluation.

QUALITY STRUCTURE



THE IMPORTANCE OF BUILDING AND DOCUMENTING THE QUALITY ASSURANCE GUIDE AT THE UNIVERSITY

Effective implementation of the Quality Assurance Guide by the Saudi Electronic University will help achieve tangible and incorporeal benefits, such as:

1. Providing tools and plans that, when applied, ensure obtaining clear data on the University's internal strengths and weaknesses.
2. Enabling the University to assess itself clearly, for the system comprises of clear procedures avvnd mechanisms.
3. Helping in continuous improvement by setting goals and means of activating and implementing them. This leads to continuous improvement which is a requirement for the proper functioning and advancement of the University.
4. Reduce errors and the time required to finish a certain task. This is achieved by constant examination of processes and continuous measurement of performance.
5. Trust and satisfaction of stakeholders through continuous measurement of stakeholders' satisfaction (faculty, staff, higher management) which helps identify and address their needs.
6. Optimizes the utilization of available human, physical, and technical resources.
7. Helps achieve a competitive advantage because the system enables the University to solve problems and make decisions that contribute to the development of the University work.

Unit 1: Academic Quality Assurance Guide

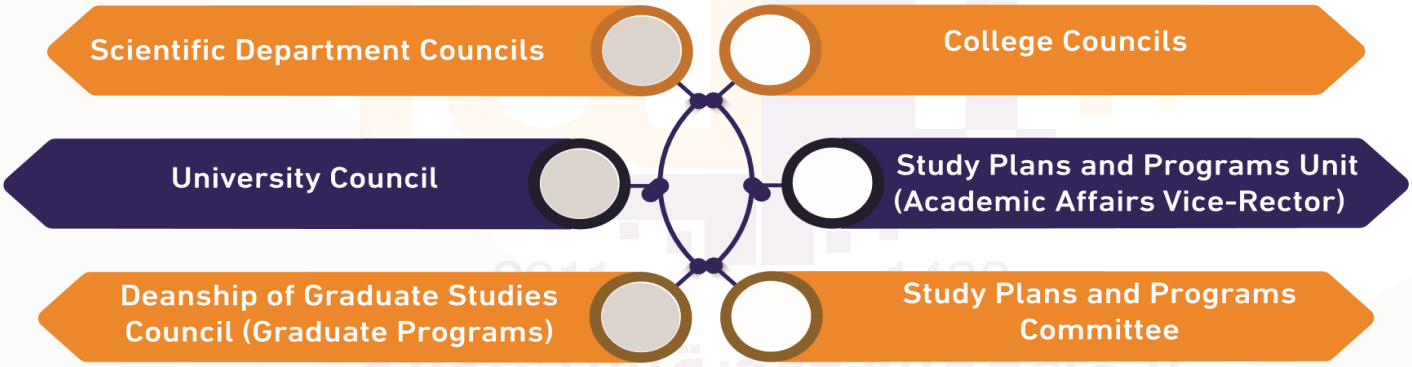
Chapter 1

Policies and Procedures for Designing and Modifying Academic Programs and Courses

INTRODUCTION

Study plans and programs are considered the tools that define and measure the institute's educational outputs and the quality of its graduates. Hence, the Saudi Electronic University has given the preparation of its educational programs and study plans immense consideration to ensure that they are of high standard in order to meet the requirements of the labor market and academic accreditation. The University directs all its academic potential and expertise, at all levels, to produce programs that achieve the University's mission and vision.

The following are the primary contributors to the University's study plans and programs:



In order to unify and formalize the procedures of study plans preparation and development, the Saudi Electronic University has prepared two guides: one for Undergraduate Studies (Appendix 1) and the other for Graduate Studies (Appendix 2). These guides document the requirements and procedures for study plans preparation and development to effectively respond to ever-changing labor market needs as well as to meet the requirements of academic accreditation that mandates periodic review of programs and study plans to ensure the following:

BASIC PRINCIPLES FOR BUILDING AND DEVELOPING PROGRAMS AND STUDY PLANS

When preparing study plans and programs, principles in Appendix 1 and 2 should be taken into consideration. They are summarized in the following:

1- **Adherence to the Kingdom's education policies, development plans, and the 2030 vision.**

2- **Alignment to the University's vision, mission and goals.**

3- **Development of students' skills and abilities in relation to self-learning and scientific research while focusing on analysis, participation and interaction.**

4- **Continuous enhancement of courses and knowledge resources.**

5- **Embedding teaching and communication technologies in teaching and learning strategies.**

6- **Using leading analogous educational institutes for benchmarking.**

7- **Involvement of internal stakeholders (colleges and scientific departments) and external stakeholders (labor market).**

8- **Compliance with relevant local academic accreditation standards (The National Center for Academic Accreditation and Evaluation) as well as international academic accreditation standards[1].**

9- **Conform to the University standardized study plans forms.**

PREPARATION AND BUILDING OF STUDY PLANS AND COURSES

The University is keen to align all programs with the needs of the labor market. This is achieved through labor market analysis prior to starting a new program or reforming and developing existing programs.

(1) Such as: College of Administrative and Financial Sciences (AACSB), College of Computing and Informatics (ABET), College of Health Sciences (CAHIIM) and College of Science and Theoretical Studies (ACEJMC).

STUDY PLAN PREPARATION STEPS

1

Graduation Requirements

- Determine the total number of credit units required for graduation.

2

Areas of Knowledge

- Determine the knowledge areas for each program.
- Determine the courses under each knowledge area.

3

Classifying Courses According to the Requirements

- Classifying courses according to different requirements (university, college, and specialization requirements).

4

Supporting Courses

- Determine supporting courses from other programs within or outside the college.

5

Classifying Courses

- In accordance with SEU's study plans, the National Qualifications Framework and the academic accreditation standards, the courses are categorized as compulsory, elective and free.

6

Pre-requirements

- Based on the evaluation of the cognitive aspects of each course and the need for prior knowledge.

7

Educational Levels

- Assigning courses to educational levels.

8

Field Experience (Practical Training)

- Determining the nature and duration of training according to the guidelines of The National Center for Academic Accreditation and Evaluation.

9

Numbering Courses

- Courses are numbered according to SEU's course numbering guidelines

10

Course Description

- According to The National Center for Academic Accreditation and Evaluation forms.
- Couse Outline

11

Course Learning Outcomes

- Determining the acquired knowledge and skills.
- Must contribute to achieving program learning outcomes in accordance with the National Qualifications Framework.

12

Study Plan External Review

- The study plan for each program must be subject to external review by experts in the field (Appendix 1).

NOTES REGARDING THE EXTERNAL REVIEW PROCESS

- The concerned scientific department nominates the names and contact information of three external referees or specialized scientific organizations[2]. The Standing Committee for Study Plans and Programs could also select referees not included in the list.
- The scientific department is required to formulate a systematic approach for responding to external referees' comments (action plan). It should produce an itemized report that includes the methodology for responding to the comments included in the external review reports, as well as, a point by point response to each comment.

UNIVERSITY REQUIREMENTS

The University expands its programs and areas of specializations according to the availability of required human resources, as well as students' demands for certain areas of specializations. In addition, specialization requirements should be compatible with blended learning. The University's programs are structured according to the requirements system which are represented as accredited hours. The requirements are divided into:

(2) One of them should preferably be international.

University Requirements

A set of courses that take into account the Kingdom's values, its culture and the University's unique features.

College Requirements

A set of courses that cover the general framework of the student's specialization , as well as, provide supporting knowledge that functions to substantiate specialized knowledge.

Specialization Requirements

A set of courses that ensures achieving the level of knowledge and skills of the graduate in the area of specialization

NUMBER OF CREDIT HOURS IN ACADEMIC PROGRAMS

The total number of credit hours in academic programs is determined according to the following:

- The requirements of the National Qualifications Framework which determines the minimum number of credit hours for all programs (Undergraduate, Graduate and Diploma programs).
- Credit hours should cover the program required areas of knowledge.
- International and local benchmarks.

ACADEMIC PROGRAMS KNOWLEDGE AND SKILLS

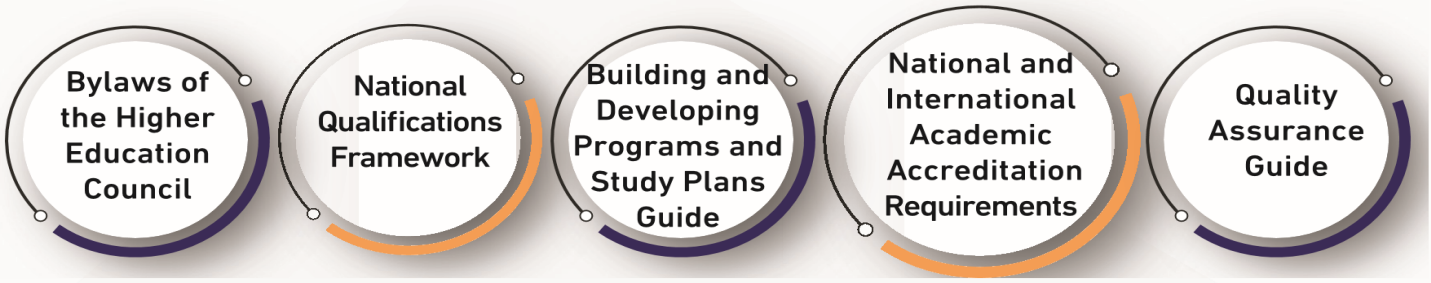
The University programs attempt to achieve a balance between knowledge and skills. Courses are designed to help refine graduates' general and specialized knowledge. This is accomplished through the rich content and diverse knowledge resources. In addition, study plans include practical aspects that transforms this knowledge into practiced skills.

Programs and courses are developed based on the principle of student-centered content. This is facilitated by blended learning which offers great flexibility to focus on the student's activities and his/her effective participation. Furthermore, student's participation on the learning management system represents an important aspect of course evaluation.

The study plans provide students with the flexibility to choose specialized knowledge areas that suits their personal preferences and ambitions through multiple tracks in each specialty as well as provision of elective courses.

PROGRAMS AND STUDY PLANS REFERENCES

Programs and study plans gain their reputation and trust from internal stakeholders (students), external stakeholders (labor market), and external referees, through adopting references that are used by the University during building programs and study plans such as relevant professional authorities and institutes[3] as well as:



(3) Example: Saudi Council for Health Services (SCFHS) and Saudi Organization for Certified Public Accountants (SOCPA)

BUILDING AND APPROVING STUDY PLANS

The University follows several administrative procedures that are necessary for building and approving programs and study plans. These procedures are detailed in Appendix 1 and 2 "Elements of the Study Plan" and are summarized below:

1. **Formulation of the Study Plan Committee at the Scientific Department**
2. **Approval of the Study Plan by the Scientific Department Council**
3. **Approval of the Study Plan by the Study Plans Committee at the college**
4. **Approval of the Study Plan by the College Council**
5. **Approval of the Study Plan by external reviewers**
6. **Approval of the Study Plan by the relevant committee according to the educational level (Study Plans and Programs Committee for Bachelor's degree level and Graduate Studies Council for Master's degree level)**
7. **Approval of the Study Plan by the University Council**

Note: Whenever comments or remarks are presented at any level of approval, the Study Plan is returned to the previous level for reviewing the comments and/or remarks and responding to them prior to passing it again to the next stage.

STUDY PLANS' SUPPLEMENTS

The following should accompany the Study Plan:

1. Formulation letter for the Study Plan Committee at the college and scientific department level
2. Reports on committees' outcomes
3. Copies of the committees' meetings minutes that include the recommendations on the Study Plan
4. External referees' reports and the action plan to deal with their remarks
5. Reports on workshops and stakeholders consultation
6. Table of Benchmarks (Appendix 1)
7. Program, courses and field experience specifications (if applicable) according to the most recent forms published by The National Center for Academic Accreditation and Evaluation

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Chapter 2

Monitoring the Quality of Teaching and Learning (Periodic Review)

INTRODUCTION

The Saudi Electronic University is keen on having high quality educational content, so it has set the necessary standards for maintaining and developing it continuously. It also furthers the efforts to maintain teaching and learning quality through periodic review of its programs and ensuring that the requirements of The National Center for Academic Accreditation and Evaluation are fulfilled. These requirements are the foundation for achieving the main quality requirements and thus, verifying all aspects of the program and ensuring its quality. They include several reports that are necessary for completing the review process, which will be discussed in some detail in this Chapter.

Periodic review of programs and courses is considered a continuous process through which the program and its foundational course are reviewed. The Course Reports and Field Experience Reports are completed at the end of the semester and submitted at the beginning of the following one. Also, a Program Report must be produced at the end of the academic year, that includes the results of students' and faculty members' questionnaires, which are completed at the end of each semester. The reports are reviewed and analyzed by relevant bodies to make necessary improvements.

The University has also developed a Learning Outcome Assessment Plan to monitor the quality of its academic programs and its suitability for the labor market as well as an Exam Moderation Mechanism to ensure the quality of its exams and objectivity of the marking process.

PERIODIC REVIEW OF PROGRAMS AND COURSES

The process of preparing and monitoring reports of courses and programs is a periodic process that is performed each semester or each year. These reports are used as key references for making decisions that affect the program as well as to submit with the accreditation requirements. The periodic review is used to conduct periodic self-studies of the program (according to academic accreditation requirements), which contribute to the process of reviewing developments and changes in the program during the previous period. The bodies responsible for following up with developing programs and courses at the University need to verify that:

- Program Specifications are compatible with Course Specifications
- Teaching methods in each course are suitable for the course learning outcomes
- Each program/ course is updated periodically

Saudi Electronic University

Figure 1 illustrates the reports and programs workflow cycle, which is a cycle of collecting evidence, reviewing Course and Program Reports, analyzing issues and evidence, and evaluating them in relation to program performance. This is done to help construct the final set of improvements for courses and programs and to verify their achievement of the accreditation requirements.

Figure 1: Reports and Programs workflow Cycle

To achieve the accreditation requirements, evidence and feedback are collected and evaluated to make necessary changes to support outcomes. As such, several reports are completed, analyzed and periodically updated. These reports include students' and faculty members' questionnaires as well as Courses and Programs Reports. The importance of periodic reports is delineated below:

1. Providing statistical data for each course and section
2. Assisting concerned bodies through analyzing reports to understand and respond to main issues
3. Examining appropriateness and effectiveness of learning outcomes in achieving program goals
4. Recommending changes to improve learning experience or courses content
5. Providing basic data and evidence for the accreditation evaluation team during their visit to the institution

PERIODIC COURSE REVIEW

The Course Specification plays a major role in the process of the periodic course review. It elucidates all the points needed to deliver the course and facilitates the process of its development. The Course Specification works as the foundation upon which the Course Report is prepared in accordance with the forms adopted by The National Center for Academic Accreditation and Evaluation (Appendix 1). The Course Specification includes:

Course coordinators distribute the Course Specification to faculty members teaching the course at the beginning of each semester to verify that all faculty members of the course follow the planned method of teaching and evaluation strategies, have a clear idea about the Course Specification and its role in supporting the program, and are fully aware of the carefully drafted learning outcomes including their associated strategies. At the end of each semester, each faculty member completes a Course Report for each course (for all sections) where he/she briefly lists the most important remarks and suggestions

as well as students' results. The course coordinator then collects all remarks and suggestions and submits them to the Scientific Department Council at the college, as a compiled Integrated Course Report, to make recommendations regarding the required changes. The following is an example that explains the course development and modification cycle through Course Reports:

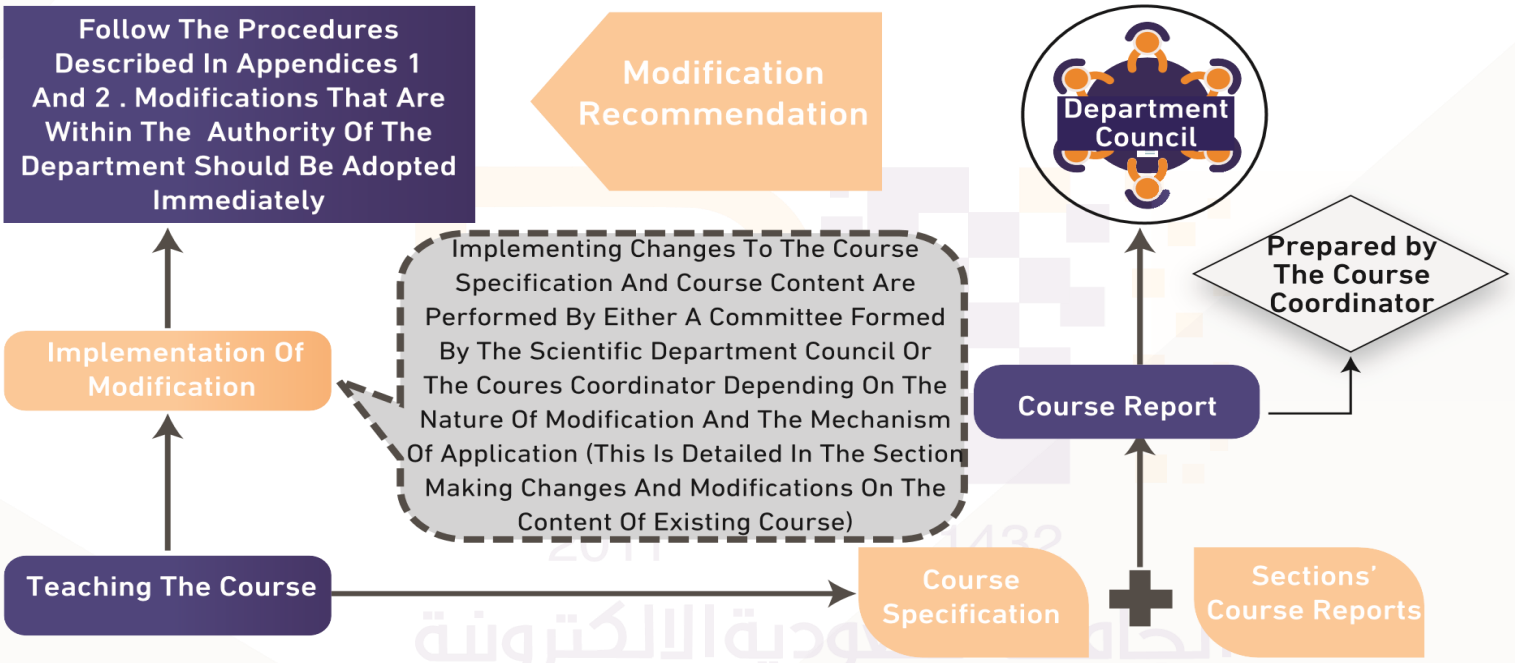


Figure 2: Course Development and Modification Cycle through Course Reports

PERIODIC PROGRAM REVIEW

The Program Specification plays a major role in the process of the periodic review, for it elucidates many details such as the skills and knowledge to be acquired by the student. This Program Specification is used as the basis for completing the Annual Program Report, which is prepared in accordance with the forms adopted by The National Center for Academic Accreditation and Evaluation (Appendix 1). It also helps characterize non-specialized learning outcomes such as communication skills and information technology. It is important to note

that program learning outcomes should be distributed to individual courses, this will in effect lead to clear alignment between the Course Report and the related Course Specification as well as and the Annual Program Report and the related Program Specification. For example, the Program Specification includes program courses distributed to levels and include each course pre-requisites. In addition, teaching and assessment methods for each learning outcome are described in the Program Specification and detailed in the Course Specification. Furthermore, program learning outcomes achievement matrix is included with their distribution to individual courses of the program.

All academic programs include a Program Specification that includes the main characteristics and its expected outcomes. This Program Specification is continuously adhered to, as it constitutes a fundamental element to contents of the Course Description. Each program also produces an Annual Program Report that serves to help monitor the program's performance as well as to make improvement recommendations. Annual Program Reports are discussed at the Scientific Department Council and relevant improvement recommendations are suggested.

CHANGING AND MODIFYING CONTENTS OF EXISTING PROGRAMS AND COURSES

Periodic review of programs and courses may indicate the need for some changes and/or modifications to develop and improve programs. Program improvements may involve many components, however, fundamental Such as the course name, code, and number remain unaffected:

- Course Description
- Course Credit Hours
- Course Elements
- Educational Resources (Textbook, references and enrichment materials)
- Learning Outcomes
- Assessment Strategies

The scientific department might realize, through the Course Reports, the need to make some modifications on the entire study plan or part of it. Some of these changes are of a repetitious periodic nature dealing with continuous updates to the course elements while retaining the basics, such as, enrichment materials and relevant data or statistics. These changes are under the authority of the Scientific Department Council; however, other changes shall be performed in accordance with the procedures described in Appendices 1 and 2, as summarized below:

- Changing the course textbook edition
- Adding, deleting or replacing a course
- Changing the course textbook
- Changing the credit hours
- Updating the course electronic content
- Changing course name and/or code
- Comprehensive program plan development

PERIODIC SELF-EVALUATION OF THE PROGRAM

Academic programs are subject to periodic self-evaluation according to the nature and duration of the program, when reviewing the study plan is due, the Vice Rector for Academic Affairs may issue a directive based on the recommendation of the Standing Committee for Study Plans and Programs. On the other hand, the pertinent academic entity (scientific department and/or college) may initiate the periodic review and development process, provided that the Vice Rectorate of Academic Affairs is notified with the need to review and develop the study plan. According to the outcome of these evaluations, developments and updates are proposed, taking into consideration the above-mentioned policies and procedures for designing and modifying academic programs and courses.

Proper course planning procedures and periodic course updates generate reports that contain essential data that provide details on all changes, developments as well as the reasons for such modifications. These reports are the cornerstone of the program's periodic self-evaluation. Since the duration of current University programs is four years, periodic self-evaluation begins at the beginning of the fourth year after initial accreditation, and it must be applied on all programs to be compatible with academic accreditation requirements, and then every five years.

The National Center for Academic Accreditation and Evaluation recommends the formulation of a committee that works on planning and monitoring the self-evaluation processes. This committee must be chaired by a senior staff with expertise in quality processes such as heads or coordinators of the programs. It is advised that they should not be involved in the program to ensure an impartial evaluation. The committee members are selected from various university departments and programs and may include deans, department heads, and experienced faculty members, as well as selected members from quality

coordinators in colleges to assist in the structuring, reviewing and development processes. The Center also recommends appointing an independent external member (if possible) and forming workgroups.

The periodic Self-Study Report includes an explanation of all aspects of the program such as current processes, developments during a specific period with the reasons for these developments and the planning of the recommended changes. It also takes into consideration, changes in the surrounding environment and faculty members' and students' feedback. The extent to which the program objectives are achieved is also documented with specific account for all the University branches and sections. Self-Study Reports must show the following basic data in detail:

The Self-Study Report should address all sections in a clear and comprehensive manner, with emphasis on describing, analyzing and using evidence and their sources. Thus, it becomes a comprehensive document that reviews quality and indicates best practices and improvement methods for the programs.

Table (1) below indicates the timetable for the most important reports:

Requirement	Required Documents	Submission Time	Responsible Person/ Department
Course Report	• Report analysis and statistical data on the course development. • Results of student and faculty members' evaluations. • Course Evaluation Questionnaire (NCAAA forms).	The end of the second week of the following semester in which the course was submitted.	Course coordinator + Department Council + Scientific Department.
Annual Program Report	• Results of students, faculty members and employment agencies evaluations. • Course Reports and Field Experience Reports of the program. • Results of improvements applied in previous reports and the development of teaching methods. • A comprehensive report to monitor the annual program including the work plan, provide the implementation of the work plan for previous years, and enter the suggested amendments in previous reports. • Add a report with all developing suggestions for the Program Specification, and the suggested amendment with explaining their reasons and confirming their accreditation by the committees. • Add and attach third-party notes.	After five weeks from the beginning of the first semester of the year following the report	Program coordinator + Scientific Department Council + Planning and Program Committee
College Performance Report	• All reports for courses and programs for four-years. • Summary of the report analysis results and statistical data about the program development during the period.	Annually	College Council

Requirement	Required Documents	Submission Time	Responsible Person/ Department
Self-Study Report	• Independent review. • Standards performance reports.	Every five years	Quality and Academic Accreditation Committee
Review college performance and approve changes	• Results of the college performance reports. • Approval evidences on changes or not, with reasons.	Every five years Annually	Planning and Programs Committee

1: Timetable of required periodic reports

LEARNING OUTCOME ASSESSMENT PLAN

The Saudi Electronic University is keen to ensure the integrity of the outputs of its academic programs and to ensure their suitability to the needs of the labor market by activating several tools that enable it to achieve this goal. One of the most important tools is the Learning Outcome Assessment Plan, which aims to assess the extent to which graduates of an academic program achieve the required level (mastery level) in the skills and outcomes that have been set in each program.

The assessment process begins by formulating learning outcomes for each course in the program intended to be assessed and then linking these learning outcomes to the program learning outcomes with determining the level of mastery (introductory, practice, or mastery). In addition, all course assignments and exam questions are linked to the course learning outcomes. Finally, the results are collected and analyzed using the computerized exam system that is used to carry out students' exams. For more details, refer to Appendix 3. The following is an illustration of the Learning Outcome Assessment Plan:

ROADMAP FOR QUALITY ASSURANCE

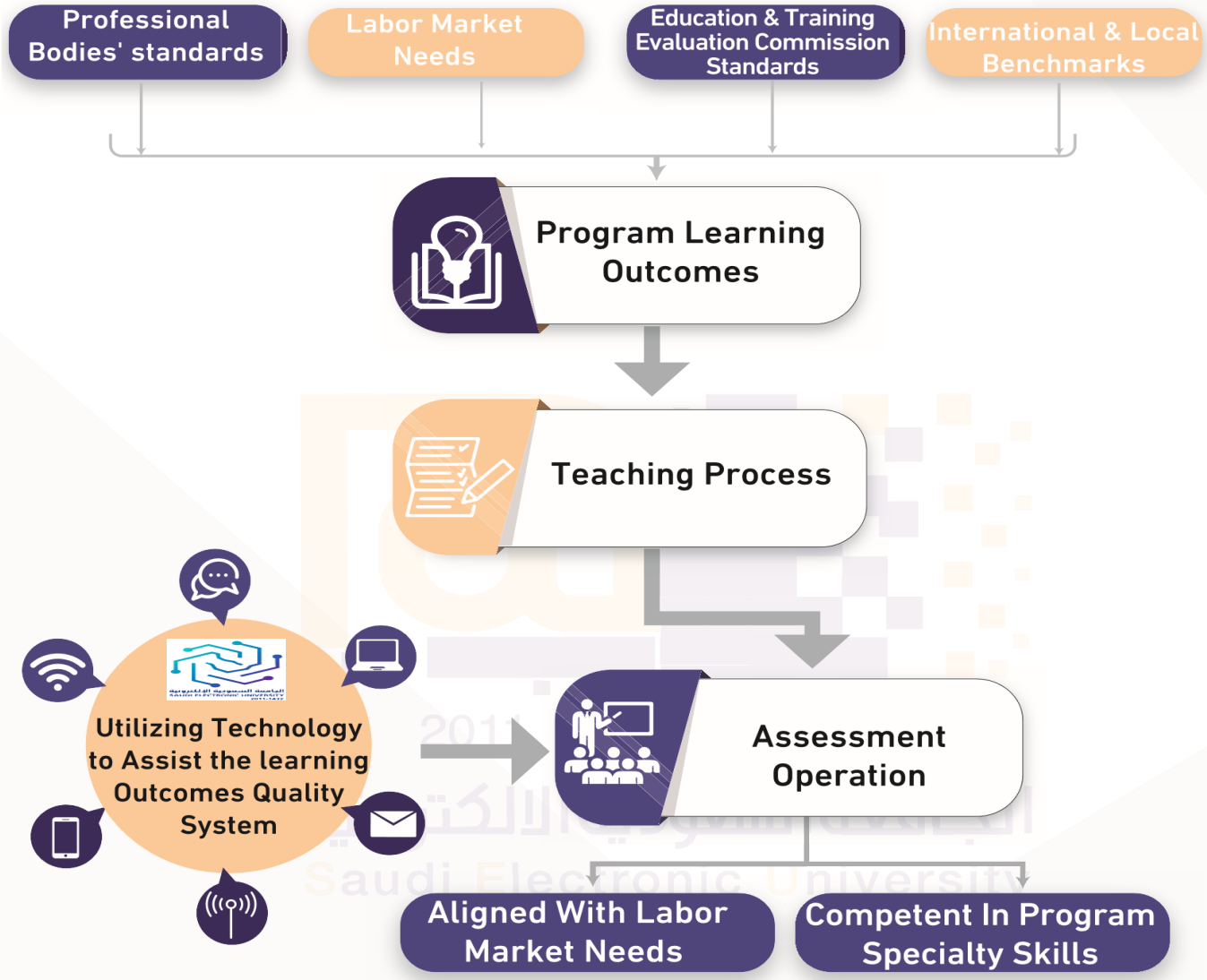


Figure 3: Learning Outcome Assessment Process

`EXAM MODERATION MECHANISM

Exams are one of the most important assessment and evaluation tools that give a reliable indication of students' access to the information and skills presented in the course. As the Saudi Electronic University is keen to ensure the quality of the exams offered to students and to ensure the fairness and objectivity of the marking process, a mechanism has been developed that aims to raise the quality of essay and non-essay questions before they are presented to students. In addition, a similar mechanism has been developed, to be implemented after holding the exams, which ensures objectivity in marking students' answers by faculty members. Similar and approved practices for developing this mechanism have been reviewed, such as the use of a rubric for marking students' answers. The application of this mechanism is implemented automatically using the computerized exam system.

For example, the computerized exam system issues statistical analysis of all non-essay questions (multiple choice, for example) and identifies the Difficulty Index and the Distractor Efficiency. It then alerts the concerned authority in the college or the scientific department (usually the head of the department) by indicating a problem while allowing them to perform a wider investigation about this problem and obtaining information needed such as the section, faculty member, branch and other information that helps in making the right decision. For more details on this mechanism and its application, please refer to Appendix 4.

Chapter 3

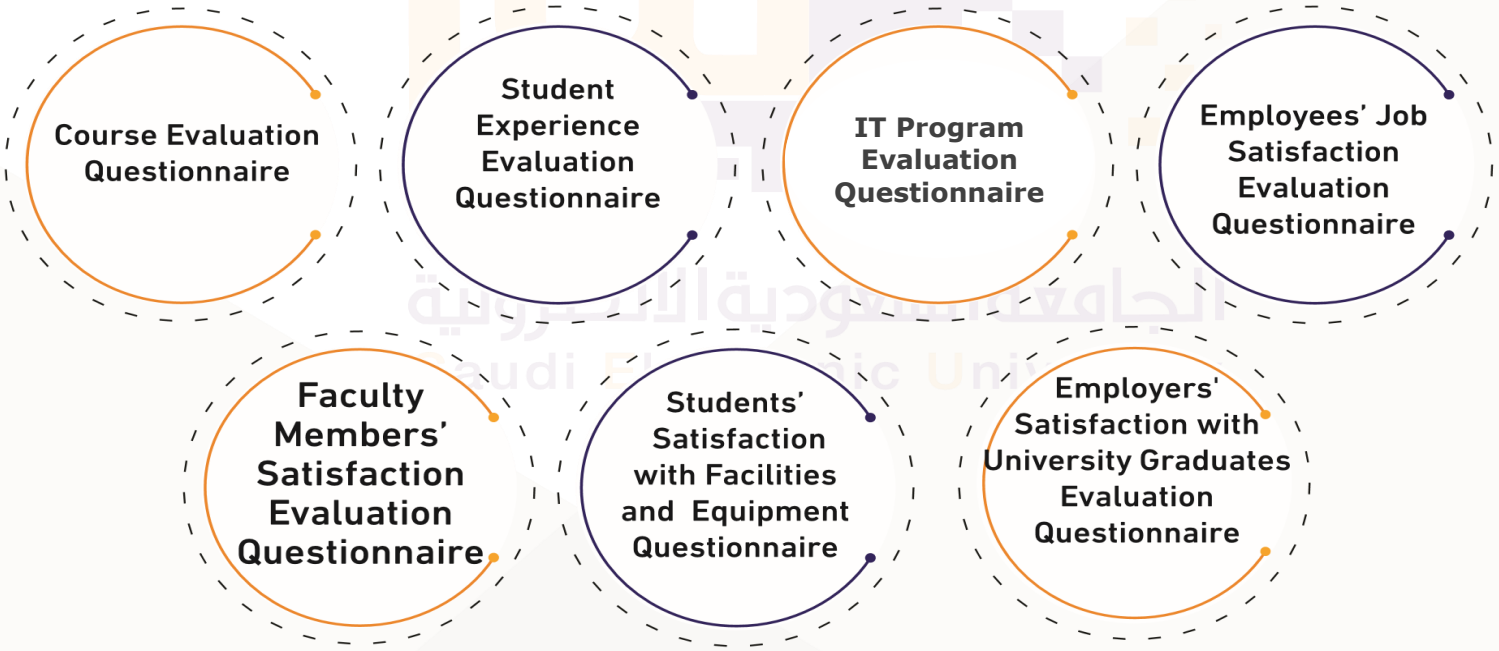
Feedback and Improvement Procedures

INTRODUCTION

It is important that all stakeholders at SEU are able to present their points of view and comments through channels ensuring that their voices are heard. The importance of this process resides in assessing the University's current status from the stakeholders' point of view, as well as, understanding what affects stakeholders' satisfaction to aid in the continuous efforts to improve it.

IMPROVEMENT PROCEDURES

The process of assessing stakeholders' satisfaction and soliciting their thoughts regarding the University performance, includes several specifically timed periodic questionnaires as the following:



Students' experience regarding the University and its programs are also evaluated through periodic annual open meetings with the University's president. In addition, college deans hold periodic meetings with their students. Furthermore, each college must supply the students with an e-mail address designated for enquires and comments. The following is a detailed account of the process of evaluating and improving the current status:

Implementation

This step is concerned with delivering the stakeholders' satisfaction questionnaire. The questionnaire is implemented according to a predetermined time schedule, for at least 3 years according to the recommendations of The National Center for Academic Accreditation and Evaluation. This is done in order to achieve stability and to avoid internal credibility threats to the stakeholders' evaluation process.

Validation

Is a process of verifying the effectiveness of the survey instrument and its relevance to the intended purpose.
This step is achieved by linking questionnaire phrases to the University goals. In addition, questionnaires are reviewed by the concerned parties involved in achieving the questionnaire's goal.

Designing

Is a process of designing an instrument to measure stakeholders' satisfaction regarding university services.
This process is done through benchmark studies looking at similar instruments used by local and international educational institutions as well as questionnaires provided by The National Center for Academic Accreditation and Evaluation

Improving Work

This step pertains to the formulation of action plans by responsible entities aiming at developing and improving practices pointed out by the results of stakeholders' questionnaires

Feedback

Refers to the results of stakeholders' questionnaire. The results are presented in the form of a report that contains the stakeholders' responses as well as the most important points of strength and weakness which were agreed upon by the stakeholders

FEEDBACK

he National Center for Academic Accreditation and Evaluation provides a set of questionnaires that are the basis of the students' feedback on the program. The following is a description of some periodically applied questionnaires at the University during the academic year, their implementation time, and their aim according to the recommendations of The National Center for Academic Accreditation and Evaluation. For further clarification, Appendix 5 includes a complete questionnaire sample.

Questionnaires Designed by The National Center for Academic Accreditation and Evaluation that have been modified to confirm with the University's teaching model (blending learning)

Course Evaluation Questionnaire

- It is delivered, each semester, to all enrolled students for every course. The results are analyzed on the section level.
- The questionnaire is released on the 12th to the 14th week of the semester.

Student Experience Evaluation Questionnaire

- It is delivered to all enrolled students once during their study time at the University. It is undertaken in the middle of the second semester of the second year for students studying in a four-year academic program.
- The questionnaire is released on the 12th to the 14th week of the semester.
- This questionnaire aims at identifying the students' impressions and observations after completing half of the program duration.

MCS Program Evaluation Questionnaire

- It is delivered to all enrolled students once during their study time at the University. It is undertaken during the final semester at the University.
- The questionnaire is released on the 12th to the 14th week of the semester.
- This questionnaire aims at identifying the students' impressions and observations when they approach the completion of their program.

Questionnaires designed by the vice Rectorate for Planning, Development and Quality, benchmarked with local and international universities

Employees' Job Satisfaction Evaluation Questionnaire

Delivered periodically to all employees once per academic year.

Faculty Members' Satisfaction Evaluation Questionnaire

Delivered periodically to all faculty members once per academic year.

Employers' Satisfaction with University Graduates Evaluation Questionnaire

Delivered periodically to the employers of University graduates once per academic years.

Students' Satisfaction with Facilities and Equipment Questionnaire

Delivered periodically to all students once per academic year.

Chapter 4

Teaching and Assessment

INTRODUCTION

Saudi Electronic University is considered the only public university specialized in the blended learning model in Saudi Arabia. It offers several bachelor's and master's programs supporting the concept of lifelong learning. The University adopts an educational model that is based on face-to-face education enhanced with utilizing information and communications technology to enrich the educational experience and impart self-learning and life-long learning characteristics to SEU graduates.

SEU has carefully selected academic programs that are not only compatible with the blended learning model but are enhanced by this model. These enhancements are reflected in the outcome of the programs that depends on technology (e.g., Bachelor of Information Technology, Health Informatics and Digital Media). Thus, SEU students will be able to identify various possibilities of using technology to deliver educational programs that will help them expand their skills and perspectives, as well as enabling them to utilize technology to its full potential in their field of study.

Finally, SEU has contacted the national regulatory authorities of each available program to determine the accreditation requirements. Some successful professional accreditation examples are the accreditation of the Bachelor's Program of Health Informatics, the Bachelor's Program of Public Health, and the Master's Program of Health Care Administration by the Saudi Commission for Health Specialties.

OVERVIEW OF THE EDUCATIONAL SYSTEM IN SAUDI ARABIA

In the context of the traditional educational system in Saudi Arabia, faculty members and lecturers are considered the source of information that can only be reached in the classroom as a one-way communication channel. However, the internet revolution has opened a new area of information communication and knowledge creation. Our society no longer relies on one source of information, it has become a conscious society looking for accurate information and seeking self-learning and development. Also, members of society demand more flexibility in choosing the knowledge they want to study and become experts in. The society needs to think and search for the source it receives its information from, for their members to become true thinkers and critics. In this sense, the philosophy of SEU creates a supporting environment that creates critical thinkers and self-learners and provides them with the necessary skills to become life-long learners. In addition, the process of developing such individual attributes requires major changes in the one-way communication channel by transforming classrooms from a one-way channel to a round table that, not only conveys information, but also allows discussion which provides a deeper understanding of the subject and eventually the field of study.

BLENDED LEARNING MODEL

The Saudi Electronic University adopts the blended learning model which combines face-to-face learning environments with the use of information and communication technology to enrich the learning experience and transfer the experiences of life-long and self-learning to the graduates. Faculty members no longer have the sole duty of transmitting information to students but are also responsible for helping students gain a deeper understanding of what they have learned. Students' personal presence, whether face-to-face, virtual (direct synchronized lectures) or even outside the classrooms (through

various Blackboard tools), provides sufficient opportunities for continuous communication with classmates as well as with faculty members to discuss or clarify their questions immediately.

THE ESSENCE OF TEACHING PHILOSOPHY AT THE SAUDI ELECTRONIC UNIVERSITY

The essence of the teaching philosophy at SEU is its unlimited information sources (books, videos and access to the Saudi Digital Library, etc.) which are organized and combined to constitute the self-learning course component that is delivered via Blackboard. The role of the faculty member in this process is to motivate and supervise students in understanding difficult concepts, discussing content and applying knowledge gained in a variety of methods that use information technology resources on Blackboard such as discussion platforms, blogs, wikis, assignments, and exams. However, a major driving force for this model comes from the weekly face-to-face interaction with students in actual and virtual classrooms (direct synchronized lectures). This process combines traditional and technology based educational systems that allows students to learn in the classroom not only at a specific time but anytime anywhere.

At the beginning of each semester, detailed information about the course, number of required learning hours, learning outcomes, course details, recommended textbooks, reference books and evaluation methodology are posted on Blackboard. This makes classroom discussions more productive and effective. What distinguishes the University is that the educational content for all sections is unified. This is done to ensure that all students have equal access to the scientific material to help them achieve the course learning outcomes.

MEASURING TEACHING EFFECTIVENESS AT THE SAUDI ELECTRONIC UNIVERSITY

The University measures effectiveness of teaching according to learning outcomes through different evaluation methodologies suitable for each course as in the traditional educational system. It is measured by using Course Report forms from The National Center for Academic Accreditation and Evaluation that are filled out at the end of each semester and periodically reviewed and compared with the program learning outcomes specified in the Course Specification that are aligned with the learning outcomes in the Program Specification. Learning outcomes and their teaching methods are developed, as needed, to ensure achieving them. In addition, the achievement of learning outcomes is measured by the students' commitment to submitting weekly or biweekly assignments as well as taking midterm and final examinations.

In order to ensure completing the educational process, verifying measurements of teaching effectiveness, applying the University teaching philosophy and achieving academic accreditation requirement, at the end of each semester, colleges prepare a Course File for each course that includes all sections. The Course File includes Course Specification forms, Course Report forms, samples of the students' exams and activities and other requirements essential to fulfill the accreditation requirements. To assure the quality of courses, the Vice Rectorate for Planning, Development and Quality is continuously working to achieve the requirements of The National Center for Academic Accreditation and Evaluation (NCAAA) through making sure that there is a complete Course File for all the courses being taught. The following is a detailed explanation of the Course File content as well as the correct way to prepare it.

COURSE FILE CONTENT

The Vice Rectorate for Planning, Development and Quality has set a unified general method to prepare the Course File. The Academic Accreditation Section works on developing and updating a guide before sending it at the end of each semester while reminding colleges of the importance of observing the unique University arrangement delineated in the presence of a number of similar sections that are taught by different faculty members in various branches of SEU. It also stresses that the Course Specification and the Course Report documents should be according to the NCAAA forms while the rest of the documents such as samples of exams and activities are submitted according to the language in which the course is taught. The colleges work on preparing a file for each course that includes:

Course File Contents		
1	Teaching Philosophy	The unified teaching philosophy can be obtained from the Academic Accreditation Section at the Vice Rectorate for Planning, Development and Quality.
2	Course Specification	One specification per course.
3	Course Outline	Summary for each course, which can be obtained from Blackboard.
4	Faculty Members' CV	For each faculty and each course.
5	Course Report	• Course Report for each section. • The Integrated Course Report is written using all sections' reports, which integrates specific details from the different sections' reports. • Include the Department Council approval of the Course Report with suggested changes in an additional specialized form.
6	Samples of Mid-term and Final Examinations with Answer Keys	For the pertinent semester.

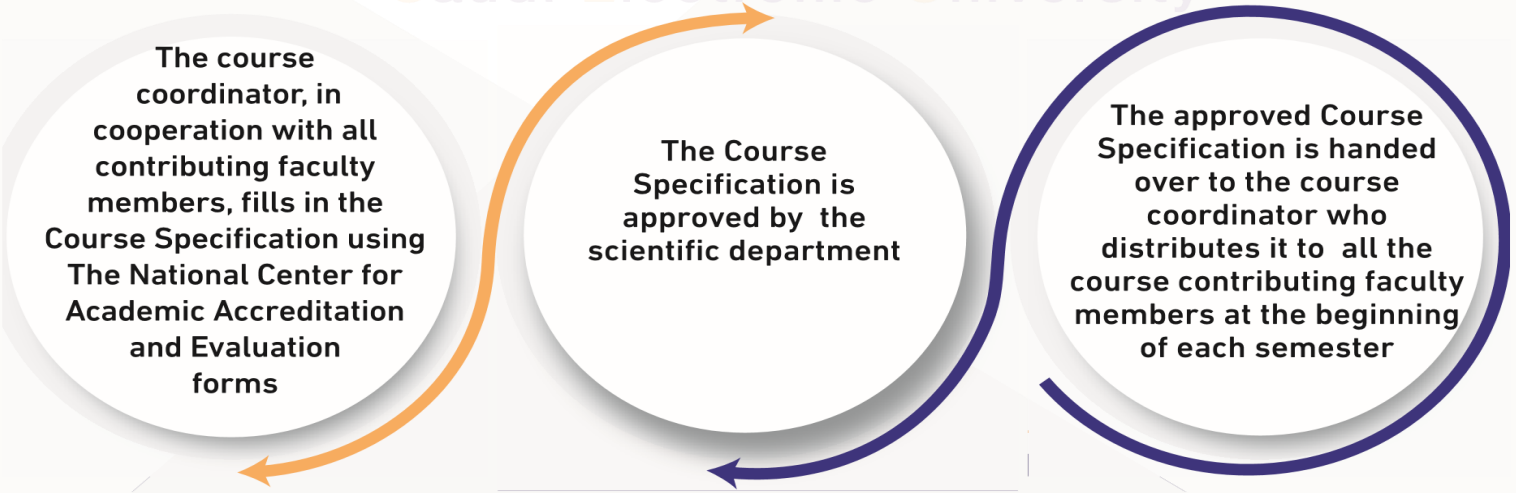
Course File Contents		
7	Samples of Students' Examination Papers	• Sample for the low grade. • Sample for the middle grade. • Sample for the high grade. (With a total of 6 samples for each section including mid-term and final exams).
8	Students Attendance	For virtual and actual lectures for the pertinent semester.
9	Students Activities	Samples of students' assignments for each section (three samples for low grade, three samples for middle grade, and three samples for high grades), totaling nine samples per section.

Table 2: Course File Contents

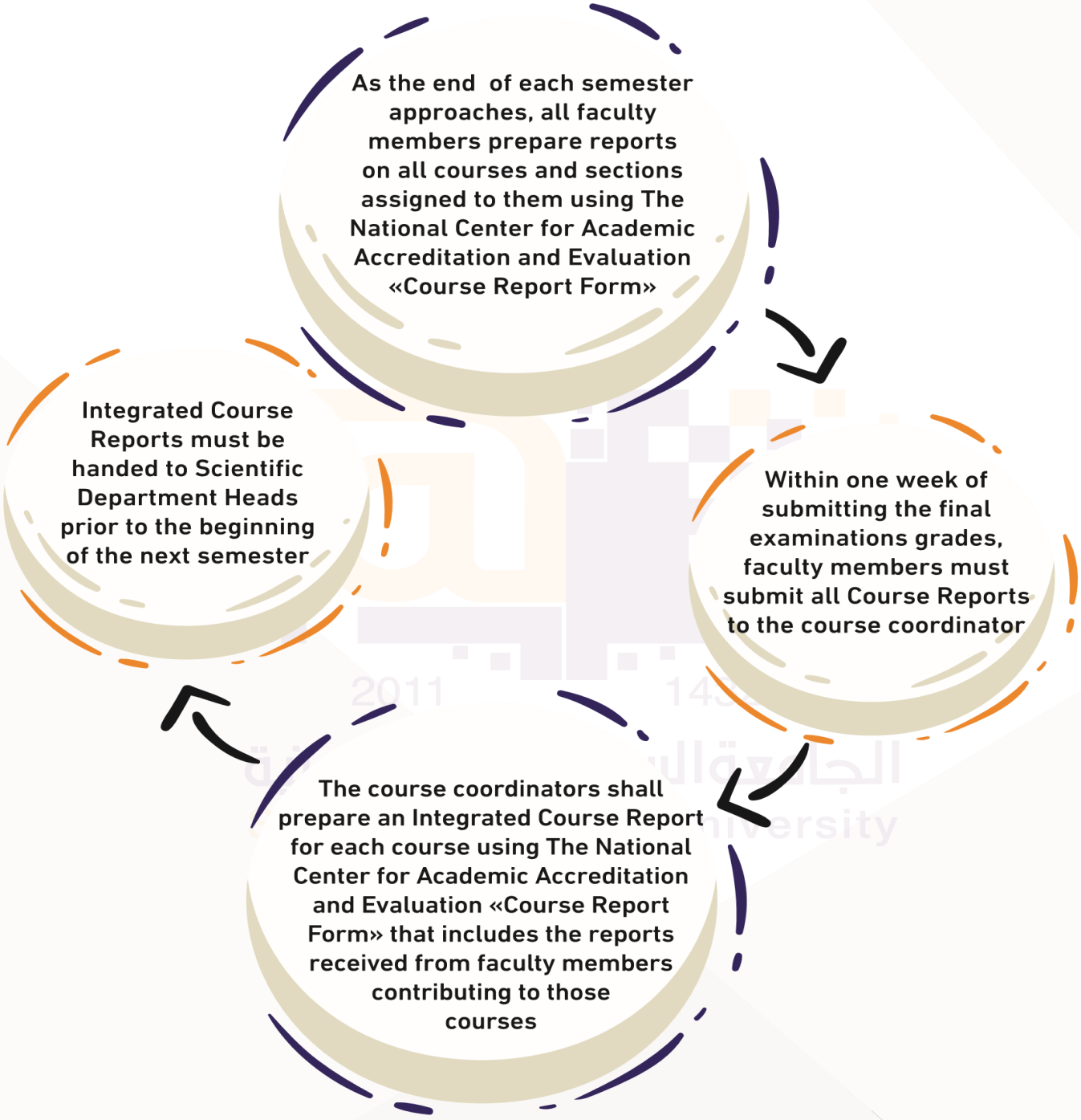
COURSE SPECIFICATION AND COURSE REPORT PROCEDUVRES

In accordance with the requirements of The National Center for Academic Accreditation and Evaluation, the forms must be in the same language of the course being taught and this is submitted to the Vice Rectorate for Planning, Development and Quality. The following is an explanation of these procedures:

PREPARING A NEW COURSE SPECIFICATION



PREPARING COURSE REPORTS FOR EXISTING COURSES



DISCUSSION OF THE COURSE REPORT AND MODIFICATIONS

The modifications suggested in Course Reports are discussed by the scientific department ideally before the beginning of the semester but no later than the

first week. The scientific department approves what it considers appropriate taking into consideration what was reviewed in the previous semester in terms of the extent of modifications and entities with authority to approve or reject such modifications. The following forms are attached with the application:

Integrated Course Report

Course Specification

An additional document attached to the Course Specification (prepared by the department) that contains:

- **Semester, name and course number for each course.**
- **Modifications recommended by the department (or approved if under its responsibility).**

PREPARING FACULTY MEMBERS AND STUDENTS FOR THE E-LEARNING ENVIRONMENT

SEU prepares all faculty members for the e-learning environment by providing a Faculty Member's Guide and the Regulations and Policies Document as well as preparing and delivering a course to them. The following is a description of the contents of the Faculty Member's Guide, the Regulations and Policies Document and a summary of the goals of the Faculty Members' Guidance Course:

Faculty Members' Guide

Contains weekly detailed information about the course. Information is available about the weekly learning outcomes, educational videos, course content, assignments and how they are submitted as well as the procedures, grading criteria, etc.

Regulations and Policies Document

- Providing faculty members with the Policies and Regulations Document in their colleges in order to clarify the common faculty members' questions and unifying the college's procedures. Regulations and policies contain:
- Students attendance
- Assignments
- Minimum evaluation requirements
- Mid-term and final examinations
- Graduation projects
- Quality assurance
- Appendix 6 illustrates the regulations and policies of the College of Computing and Informatics.

Faculty Members' Guidance Course

- It aims to teach faculty members how to access and apply electronic resources in the teaching environment. The course also provides guidance on how to prepare students to use these tools. Upon successful completion of this course, faculty members will be able to:
- Describe the e-learning environment at SEU.
- Elucidate the student-centered learning programs at SEU.
- Implement elements of the electronic environment at the University.
- Verify that the online course components are working effectively.
- Analyze the results of operating the Blackboard system.
- Identify successful student behaviors that help create an optimum learning environment at SEU.

STUDENTS' EVALUATION

SEU offers a range of programs, each containing many learning outcomes that students must cover through courses. These learning outcomes state that all graduating students from any given program are qualified and can demonstrate the necessary skills required. Learning outcomes are also a way of measuring teaching effectiveness at the University based on the use of different assessment approaches appropriate for each course.

To ensure that students to achieve the course learning outcomes, SEU has a standardized assessment system. This unified system is applied to all courses to ensure that the assessment is the same for all branches in the Kingdom of Saudi Arabia for both males and females. This assessment arrangement, in addition to the unified educational content for all course sections, and the faculty member being a facilitator of the learning process and not the source of information, ensures fairness to the students and provides them with an equal opportunity to achieve each course learning outcome. For example, assignments, midterm and final examinations (which are held in an actual environment with the presence of students in the classroom) are the same for all students registered in the course. That is in addition to benefiting from the students' evaluations and comments on faculty members and comparing the contents of each section's Course Report in order to verify that the student's evaluation was done fairly and accurately. The standard evaluation system for each course consists of weekly assignments, midterms and final examinations. These grades are divided for each course as follows:

WEEKLY COURSEWORK

Each unit contains assignments covering the learning outcomes associated with the course. The type of assignment differs depending on the unit. However, part of the teaching philosophy is to provide different types of assignments

in each unit to provide the students with different skills and to enable them to solve different problems. Assignments include essays, written reports, problem solving, multiple choice questions, discussions, and oral presentations. All assignments, unless its nature makes it not possible, are sent through Blackboard at a specific time. In addition, submitted essays are verified to detect plagiarism via Blackboard's "SafeAssign" tool. Students receive their grades and comments through the Blackboard system. In addition, submitted assignments can be discussed through the discussion board on the Blackboard system.

Evaluation	Percentage of total grades
Coursework	25٪
Midterm Exams	25٪
Final Exams	50٪

Table 3: Grade Distribution

MID-TERM AND FINAL EXAMS

Examination committees prepare examination questions for each course and assure that it is linked to the learning outcomes. Each course has a coordinator who supervises and coordinates all faculty members to ensure that they all participate in various teaching, learning and assessment processes and to ensure consistency among sections offered in all different branches and departments, be it male or female. All exams are unified between all branches for all students and are conducted on the same date and time for all sections of this course. The following is a presentation of the rules for preparing the mid-term and final exams:

1. The course coordinator fairly distributes the course content to course faculty members, explaining the number and type of questions expected from each faculty member
2. Each faculty member generates a set of questions and answer keys and sends them to the course coordinator
3. The course coordinator builds a test question bank making sure that it measures the course learning outcomes
4. An examination preparation committee is formed consisting of two faculty members teaching the course alongside the course coordinator. This committee is responsible for creating two sets of examination papers with their answer keys
5. The examination preparation committee submits the two sets of examination papers to the head of department for review
6. A copy of the final sets of examination papers is submitted to the college dean's office
7. All branches conduct the examinations at the same time
8. The course coordinator and faculty members of the course receive the answer keys immediately after the examination
9. Answer sheets are archived after marking (For more information on the archiving mechanism refer to Appendix 7)
10. Mid-term exam grades are posted in the «Grades Center» on the Blackboard system and are available to students immediately. On tother hand, final exam grades are posted on the Student Information System (Banner)
11. In the post-midterm lecture, faculty members discuss mid-term examination questions and present the optimum answers to the students
12. Students are permitted to review their marked mid-term examination papers during office hours. However, final examination papers can only be re-marked through an official request to the college administration

Important guidelines regarding preparing examination papers

- Faculty members should not use the "test bank" to build mid-terms or final examination questions.
- Faculty members should not repeat examination questions from previous semesters.
- Faculty members should follow the guidelines and specialized forms when creating mid-term and final examinations.
- Faculty members should provide detailed criteria for the grading of suggested examination questions when submitting these questions to the course coordinator.
- Link each question with the relevant course learning outcome.
- Post-evaluation procedures require faculty members to submit samples of each assignment, mid-term and final examinations as described in the course file preparation (above). All required files (mentioned above) are submitted to the electronic quality assurance system for review.

Important dates for preparing examination papers

The due date for faculty members to submit the mid-term suggested questions to the course coordinator is on Monday of the 6th week.

The due date for submitting two sets of the mid-term examination papers by the course coordinator to the Head of Department is on Monday of the 7th week.

The due date for the faculty member to submit the suggested questions for the final examination to the course coordinator is on Thursday of the 13th week.

The due date for submitting two sets of the final examination papers by the course coordinator to the Head of Department is on Thursday of the 14th week.

ORGANIZATIONAL RULES OF PERFORMING EXAMS

The Vice Rectorate for Academic Affairs has issued a guide for the organizational rules of conducting examinations which is intended to organize and ensure smooth flow of the examination procedures with the highest accuracy and quality. Colleges also provide faculty members and students with relevant sections of the examination organizational rules. In addition, the University has formed a committee responsible for controlling the progress of examinations at the University and its branches.

CONTINUOUS DEVELOPMENT OF FACULTY MEMBERS

Saudi Electronic University aims to continuously develop skills of its faculty members, for it provides internal and external training courses for general and specialized skills in cooperation with other universities and specialized faculty training centers in order to prepare them for their duties. It also supports them in publishing research by providing them with both moral and financial support. In addition, the University encourages them to acquire knowledge that contributes to building the society and enriching various fields of science and encourages them to participate in national and regional plans. In addition, the University is keen to attract distinguished Saudi faculty members and supervises local and international scholarship programs for its junior faculty members.

It should be noted that the University is keen to provide all its faculty members, including junior faculty members, with an opportunity of attending conferences, seminars, scientific meetings and international training courses annually. In addition, faculty members attend internal training and development courses annually such as the Quality Requirements of Student Guidance

and Counseling Services, statistical analysis using SPSS program, basics of research in various databases, scientific writing and publishing, classification of journals, and the use of the Saudi Digital Library. The University is also keen on training faculty members on the requirements of academic accreditation by annually choosing a carefully selected group of faculty and staff members who can actively contribute and transfer knowledge to the rest of the faculty members and staff to attend courses on attaining the requirements of quality and academic accreditation, e.g. Evaluation of learning outcomes, and periodic reports of programs and courses among others.

STUDENTS SERVICES

The University provides electronic services through the "Student Services" webpage, that enables students to obtain basic educational process information as well as enabling them to accomplish all their educational and administrative needs without visiting the campus. The webpage displays individual services including its description, the time required for its completion, a guide on how it works and a video for each service illustrating how to request it which makes it easier to access. Appendix 8 explains in detail these services, their goals and how to gain access to them.

STUDENT RIGHTS AND RESPONSIBILITIES

Since students are the center of the educational system, SEU not only works to ensures students' rights, but also strives to make them aware of them and of their responsibilities. In effect, this strengthens students sense of belonging to the University.

SEU publishes several rules and regulations to help students understand their rights in detail such as the Undergraduate Bylaws of Study and Examination and their University specific rules, the requirements for credit transfer from other institutions, University violations and their associated disciplinary measures,

methods of filing complaints or grievances and the document of Students' Rights and Responsibilities.

The University has formed the Standing Committee for Student Affairs and Discipline as well as the Committees of Students' Rights Protection all of which are independent bodies that work to ensure students' rights, and that students' comments and complaints are impartially reviewed to overcome issues that might affect the student and his/her educational experience. In addition, this is to ensure that the complaints are dealt in a professionally, standardized and timely manner, SEU has formed the committees at two levels to positively impact the University and its educational environment as follows:

The Main Committee of Student Rights Protection	The Sub-Committee of Student Rights Protection
Considers complaints against the administrative units of the University, grievance against decisions made by the Students' Rights Subcommittees, or complaints that were not resolved by the Students' Rights Subcommittee within the prescribed time period.	Considers all the students' educational and administrative complaints except the matters related to the administrative units that are not within the context of the student's college.

STUDENTS' RIGHTS SYSTEM

The Saudi Electronic University has developed a special system that helps students review their rights and responsibilities and enables them to submit any complaints or comments to the Committees of Students' Rights Protection through an electronic system that students can access via Student Services on the University website. It has also prepared a User's Guide to this Students' Rights System to ensure that it is fully utilized (Appendix 9).

STANDING COMMITTEE FOR STUDENT AFFAIRS AND DISCIPLINE

The University has formulated a Standing Committee for Student's Affairs and Discipline to tackle all student academic issues that are not included in the Undergraduate Bylaws of Study and Examination and their University specific rules, such as:

Granting students an extra attempt when they have been dismissed due to several warnings or exceeding double the time needed to finish the degree.

Change the request of moving from one branch to another.

Transferring from one college ,or department, to another for cases where transfer conditions do not apply.

Withdrawing from a semester after the final exams have begun provided that the student has not taken any exam.

Approving final exam results beyond the regular period.

Re-enrolling students who are not meeting the criteria for re-enrollment.

All issues that have not been listed and are related to a student's academic affairs.

Waiving tuition fees according to regulations set forth by the committee.

Allowing the conduction of a substitute examination to those who do not meet the adopted criteria.

Studying cases of misconduct requiring a disciplinary action.

Managing students' behavior so that they become effective members in their societies.

Ensuring the quality of the academic process and its supporting activities.

Issuing proper disciplinary measures to students' misconducts to correct their behavior and academic conduct.

ACADEMIC ADVISING SERVICES

The Academic Advising Service has been established to provide students with academic and non-academic support. It mainly aims to familiarize students with the right person who can give them help and guidance during their studies. It also provides students with an opportunity to get the support and assistance needed to align their study plans with their goals. Academic Advising is considered a great chance for students to improve their educational experience. The main objectives of Academic Advising is to assist students in the following:

- Align their academic goals with their career plans
- Choose study plans or courses that suit their needs
- Improve their understanding of college requirements and University policies and directives
- Convey their inquiries to the college so it can assess its performance and then re-evaluate current instructions and policies
- Keep in touch with the head of department
- Resolve any academic obstacles facing students

The role of the academic advisor will be explained in detail in the next section.

Important Note

A certain number of students is assigned to each academic advisor. These students remain under the supervision of their designated academic advisor during their study. At the beginning of each academic year, the list of students is updated, so that the names of graduated students will be deleted, and new students added.

ACADEMIC ADVISING REGULATIONS

Academic Advising is the activity carried out by faculty members in order to familiarize students with regulations, help them move forward in education, and assist them in overcoming academic difficulties (for more information, refer to Appendix 10). The following table shows the main tasks of the academic advisor and the procedures associated with each task:

	Task	Procedures
1	Welcoming new students and introducing them to the University system and Academic Advising Unit.	Participate in preparatory year programs for new students to introduce them to the University system and make them aware of the most important tasks and duties expected from them.
2	Examining reasons behind student's failure in academic performance and helping them overcome these difficulties.	Constant focus on low performing students to improve their study performance.

	Task	Procedures
3	Guiding students to their scientific departments, introducing them to individuals in charge, and informing them about pertinent departments within the University.	Examples to illustrate how this task would be delivered to students: • If a student would like to drop or add any course, the academic advisor should clarify the mechanism of this procedure and direct him/her to the individual in charge. • If a student faces technical problems in the Learning Management System (Blackboard), the academic advisor should direct students to the relevant department.
4	Meeting with a student at least once per semester if needed.	Commit to academic advising hours during the week (two hours per week at least).
5	Introducing students to their duties.	• Inform students of their responsibilities and duties. • Urge students to visit the University and the college websites to be aware of rules, regulations and the academic schedule, so they are continuously up to date.
6	Advising students to develop their skills, in order to achieve their goals.	Urge students to attend and participate in activities and workshops held on campus to help them develop their skills, increase their awareness in various disciplines and achieve their academic goals.
7	Explaining rules and regulations of the Saudi Electronic University.	The academic advisor should be familiar with all rules and regulations of the University and be able to convey them to their students.
8	Making an electronic file for each student which should include the following: Information about the student. • Any important documents related to the student. • Academic Advisor Interview Form.	The academic advisor should save the student's academic information.

Table 4: Academic Advisor Role.

Unit 2:
Quality Assurance Guide for IT Program

Chapter 1

Introduction

INTRODUCTION

This document will help you in preparing your quality files properly. By following the instructions and guidelines given in this document, we expect you submit error-free files. Kindly keep in mind that double-checking your files will definitely avoid mistakes. *As this is the first version of the quality manual, the Quality & Academic Accreditation Committee appreciates your feedback on* A.Abukhadrah@seu.edu.sa.

National Center for Academic Accreditation and Evaluation (NCAAA)*

- NCAAA is a school accreditation for the nation of KSA. It aims at contributing to the enhancement of quality and excellence in higher education institutions and programs through academic evaluation and accreditation.
- **Mission**: Supporting, evaluating, and accrediting higher education institutions and programs through the implementation of objective and transparent systems and procedures with the aim of securing local and international confidence in the outcomes of these institutions and programs.

Latest NCAAA forms is reachable via https://www.seu.edu.sa/vropdq/en/quality-formsncaaa-forms

Terminology:

QA: Quality Assurance
CR: Course Report
CS: Course Specification
CO: Course Outlines
CLOs: Course Learning Outcomes
PLOs: Program Learning Outcomes

Quality Assurance at the College of Computing and Informatics (CCI)

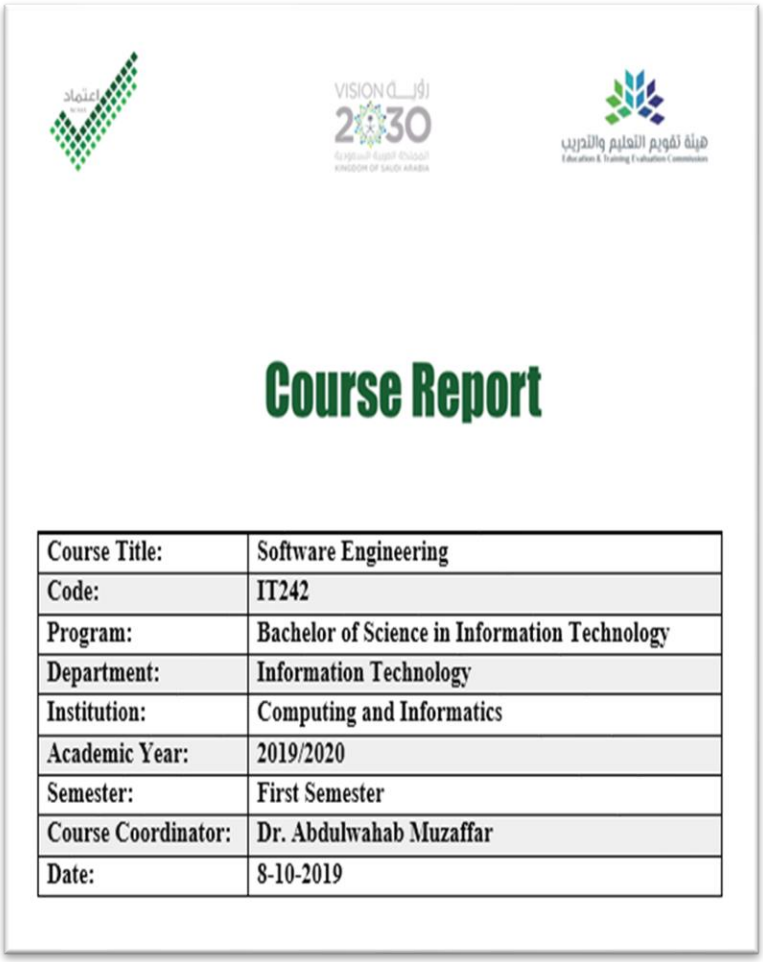
At the college's level, we fill reports & collect samples:

- CR (filled by the instructor for each course section)
- Samples from students' activities & exams (collected by the instructor for each course section)
- Integrated CR (filled by the course coordinator)
- CS report (filled by the course coordinator)
- Annual Program Report (Prepared by Quality & Accreditation Committee at CCI)
- Program Specifications Report (filled by Quality & Accreditation committee at CCI)

* https://etec.gov.sa/en/productsandservices/NCAAA

Course Report (CR): Main parts to fill

- Course Identification
- Course Delivery
  - Topics covered, Teaching Strategies, Assessment Methods, & Verification of Results.
- Students Results
  - Distribution of Grades & Recommendations
- CLOs
- Course Evaluation
  - Recommendations for improvement & strengths
  - Difficulties
  - Improvement Plan



Course Report

Course Title:	Software Engineering
Code:	IT242
Program:	Bachelor of Science in Information Technology
Department:	Information Technology
Institution:	Computing and Informatics
Academic Year:	2019/2020
Semester:	First Semester
Course Coordinator:	Dr. Abdulwahab Muzaffar
Date:	8-10-2019

Samples to collect:

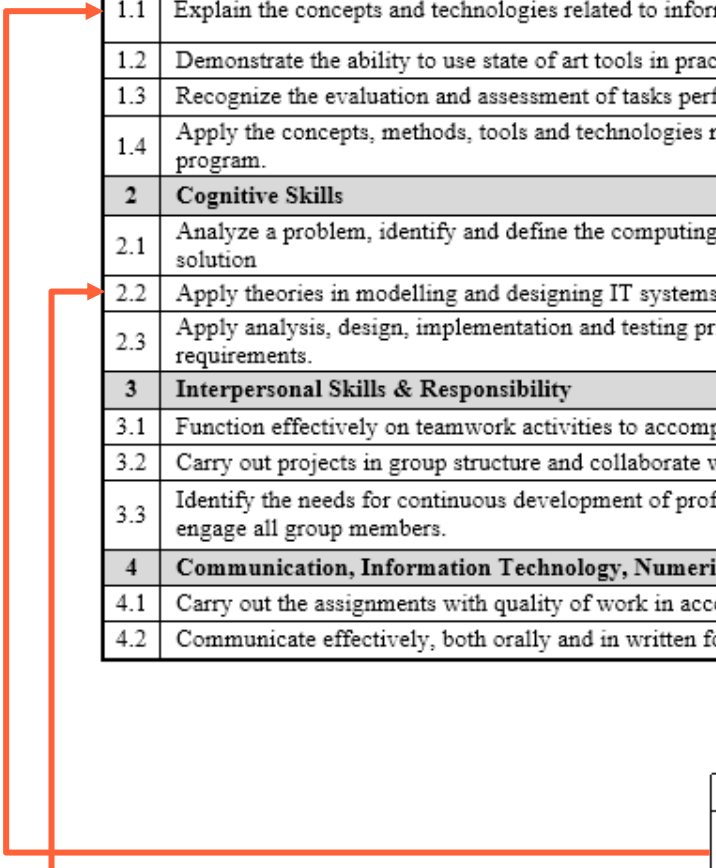
- ✈ Samples with high, middle and low grades collected from exams (Midterm and Final exams)
- ✈ Samples of students' activities (Assignments, Quizzes, Projects, case studies …etc.)
- ✈ Students attendance & evaluation surveys

Relationship between PLOs & CLOs

For CCI, the CLOs of all courses are linked to PLOs. Below example shows the mapping of the CLOs of IT242 to their corresponding IT PLOs. The mapping of all CCI courses is available on the Quality Portal (http://tawkeed.seu.edu.sa)

PLOs of IT Program

	Program Learning Outcomes
1	**Knowledge**
1.1	Explain the concepts and technologies related to information technology.
1.2	Demonstrate the ability to use state of art tools in practice based on the obtained skills.
1.3	Recognize the evaluation and assessment of tasks performed as IT professionals.
1.4	Apply the concepts, methods, tools and technologies mastered during the academic program.
2	**Cognitive Skills**
2.1	Analyze a problem, identify and define the computing requirements appropriate to its solution
2.2	Apply theories in modelling and designing IT systems using cutting edge technologies.
2.3	Apply analysis, design, implementation and testing principles of IT solutions to fit industrial requirements.
3	**Interpersonal Skills & Responsibility**
3.1	Function effectively on teamwork activities to accomplish a common goal.
3.2	Carry out projects in group structure and collaborate with group members.
3.3	Identify the needs for continuous development of professional skills with the ability to engage all group members.
4	**Communication, Information Technology, Numerical**
4.1	Carry out the assignments with quality of work in accordance with international standards.
4.2	Communicate effectively, both orally and in written form, using appropriate media.



	Course Learning Outcomes
1	Explain different software processes and how to choose between them. (1.1)
2	Design in the large, including principled choice of a software architecture, the use of modules and interfaces to enable separate development, and design patterns. (2.2)
3	Demonstrate various quality assurance techniques, including unit testing, functional testing, and automated analysis tools. (2.3)
4	Elicit requirements from a client and specify them. (3.1)
5	Apply good coding practices, including documentation, contracts, regression tests and daily builds. (4.1)

Chapter 2

Uploading the Quality Files

UPLOADING THE QUALITY FILES

To upload your files, kindly use the following details:

Link of the Quality portal: http://tawkeed.seu.edu.sa

Username: *university account*

Password: *same password for university account*

Two-phase files uploading:

Uploading quality files is based on two phases: Phase-1 & Phase-2.

Phase-1 files:

For **instructors**: CV, samples of Assessment 1 (high, middle, & low) and Midterm Exam (high, middle, & low) (7 files in total)

For **coordinators**: Course Outline, SEU Teaching Philosophy, and Midterm Exam Questions & Answers files.

The due date to upload Phase-1 files is usually by the end of Week 11.

Phase-2 files:

For **instructors**: samples of Assessments 2 & 3 (high, middle, & low), Final Exam samples (high, middle, & low), Student Attendance, Course Report (CR), and students' survey. For **coordinators**: Course Specification, Final Exam Q&A files, Integ. CR, and coordinator survey.

The due date to upload Phase-2 files is four days after the course's Final Exam.

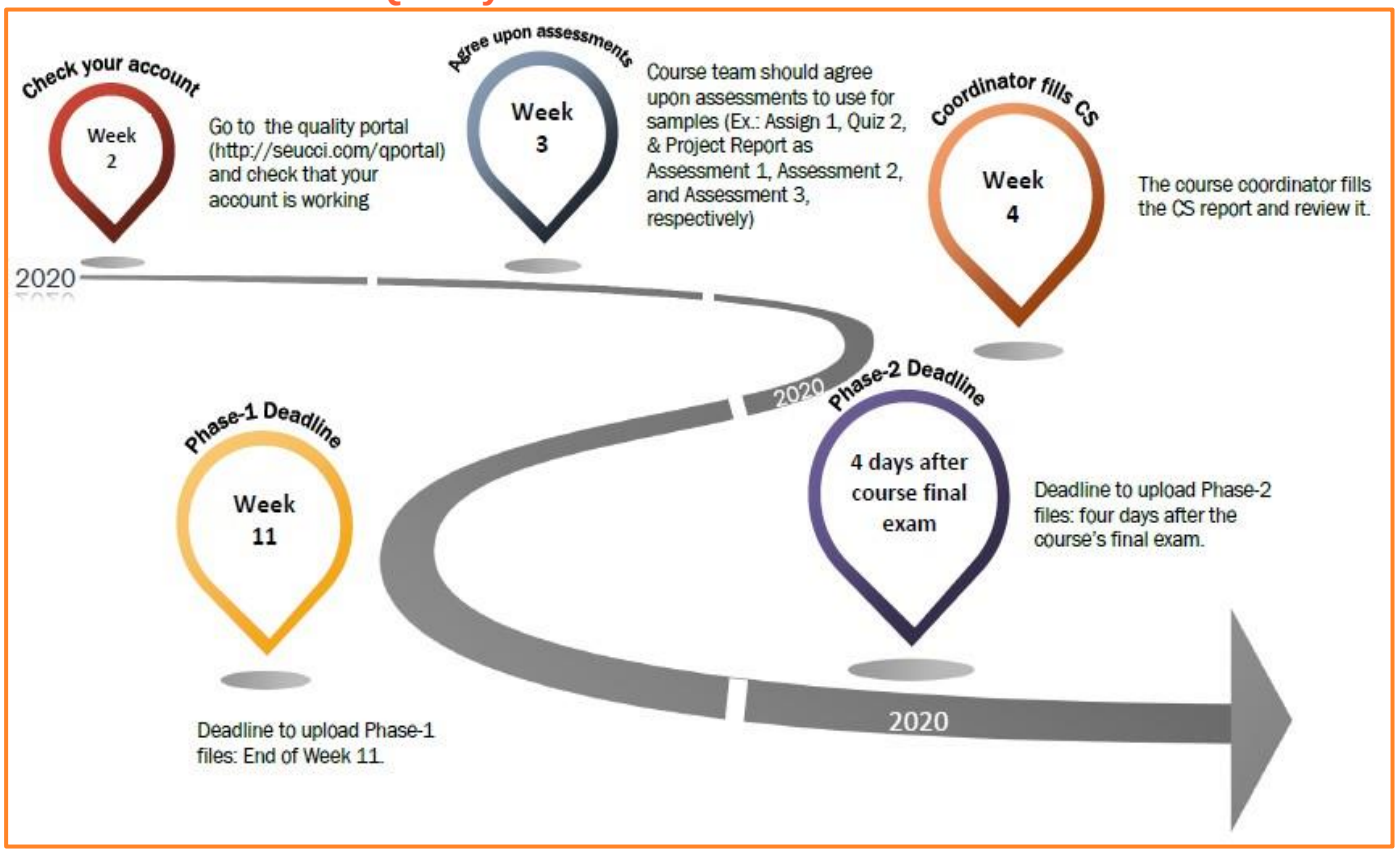
Notes:

1. *Reminders will be sent to all faculty members to upload Phase-1 & Phase-2 files.*
2. *The committee will contact instructors who have any mistakes in their files to correct the mistakes & upload correct samples.*
3. *The coordinators are kindly requested to tell the instructors in their groups what assessments to use when taking samples. For example: Assignment 1, Online Quiz 1, and Project Report as Assessment 1, Assessment 2, and Assessment 3, respectively.*
   Kindly keep in mind that online quizzes and project reports should have unified cover pages among all CRNs/samples. Appendix A shows a suggested cover page for online quiz samples. Kindly refer to the course coordinator concerning extracting the samples of quizzes and exams.

Good Practice: Create a new folder in your Outlook email to keep all emails you receive related to quality.

3.

Timeline for Main Quality Tasks



As an Instructor, how do you complete the CR properly?

On the day of the Final Exam, the coordinator will send you the CR prepared for your course. You will only complete specific parts given in Red. In addition, kindly adhere to the guidelines from the course coordinator.

1. Kindly do NOT change the text appears in **Black**. Change only the Red-color text. Once you finish completing your report, you should change all text to **Black**.
2. **Page 1**: Add your name and date.
3. **Part A**: Put your section details.
4. **Kindly do NOT change Parts B.1 to B.5 and E.2**.
5. **Part B.6**: Give any recommendations that may improve the course delivery.
6. **Part C.1**: Fill the grades table. Do double-clicking to activate the Excel sheet.
7. **Part C.2**: Give your comments on the student results (Give a reasonable factor that affected the results).
8. **Part C.3**: Give any recommendations to improve the student results.
9. **Part D.1**: Give the actual level for each CLO from the ***Examination system*** system. Add your comment for each assessment result as follows:
   - Write **Achieved** if the actual level is greater than or equal to 70%. Otherwise, write a proper reason, for example:
     - ✦ Some of the students in this section are poor in the course subjects.
     - ✦ The Midterm Exam was of high level.
     - ✦ The Final Exam was of high level.
     - ✦ Some students have work and they did not study well due to time matter.
     - ✦ Or any other acceptable reason.
10. **Part D.2**: Add any recommendations that may improve the assessment results.
11. **Part E.1**: Fill the following parts from the survey you received from quality@seu.edu.sa:
    - Date of Survey, Number of Participants, and Percentage of Participation**.**
    - **Strengths**: Add the strength points appear under: Evaluation Summary/Strengths and Areas of Improvement/Strengths, then give your comment or response.
    - **Areas for improvement**: Add the mentioned improvement points appear under: Evaluation Summary/Strengths and Areas of Improvement/Areas of Improvement, then give your comment or response.
    - **Suggestions for Improvement**: Add the students suggestions appear under: "What suggestion(s) do you have to improve this course?" then give your comment or response.

    If the survey report is not available, then kindly write "the students of this section did not fill the survey report".

    If students did not give any suggestions, then write "No suggestions were given by the students".

12. **Part E.3**: Give any general recommendations
13. **Part F**: Give any difficulties or leave it **None**.
14. **Part G.2**: Fill this part properly by giving any recommendations.

As a Course Coordinator, how do you fill the first version of the CR properly?

1. Kindly put the text, which the instructors of your group should update, in Red color. Leave other text in **black**. Once the instructors complete their files, they should change all text to Black.
2. Fill **Page 1** properly by reflecting your course details.
3. **Part A**: put your section details so the instructors can know how to fill this part.
4. **Parts B.1, B.2, B.5, and E.2** should not be changed; they should be unified among all CCI courses.
5. **Part B.3**: Add other teaching strategies you used in the course. Should be the same as what exists in the **CS report**.
6. **Part B.4**: Add other assessment methods you used in the course. Should be the same as what exists in the **CS report**.
7. **Part B.6**: Give any recommendations that may improve the course delivery.
8. **Part C.1**: Fill the grades table. Do a double click to activate the Excel sheet.
9. **Part C.2**: Add your comments on the student results (Give a reasonable factor that affected the results).
10. **Part C.3**: Add any recommendations to improve the student results.
11. **Part D.1**: Add the CLOs and link them to the PLOs. Use the Excel sheet you received earlier. In addition, add the methods you used to measure each CLO. Give the actual level for each CLO from the ***Examination system*** system. Add your comment for each assessment result as follows:
    - Write **Achieved** if the actual level is greater than or equal to 70%. Otherwise, write a proper reason, for example:
      - ✦ Some of the students in this section are poor in the course subjects.
      - ✦ The Midterm Exam was of high level.
      - ✦ The Final Exam was of high level.
      - ✦ Some students have work and they did not study well due to time matter. ✦ Or write any other acceptable reason.
12. **Part D.2**: Add any recommendations that may improve the assessment results.
13. **Part E.1**: Fill the following parts from the survey you will receive from quality@seu.edu.sa:
    - Date of Survey, Number of Participants, and Percentage of Participation**.**
    - **Strengths**: Add strength points appear under: Evaluation Summary/Strengths and Areas of Improvement/Strengths, then give your comments or response.
    - **Areas for improvement**: Add the mentioned improvement points appear under: Evaluation Summary/Strengths and Areas of Improvement/Areas of Improvement, then give your comments or response.
    - **Suggestions for Improvement**: Add the students suggestions appear under: "What suggestion(s) do you have to improve this course?" then give your comments or response.
14. **Part E.3**: Add any general recommendations
15. **Part F**: Add any difficulties or leave it **None**.
16. **Part G.1 and G.2**: Fill these parts properly by giving the recommended actions.

Important Remarks:

1. **The following parts MUST be the same for all CRs and the Integ. CR:**

B.1 Course Contact Hours
B.2 Topics not Covered
B.3 Teaching Strategies
B.4 Activities/Assessment Methods
B.5 Verification of Credibility of Students' Results
The list of CLOs and the Target Level (70%) in D.1
E.2 Other Evaluations
G.1 Course Improvement Actions

2. **The list of CLOs, the used Teaching Strategies, and Assessment Methods MUST be the same among all course reports (CS, all CRs, and the Integ. CR)**

As a Coordinator, how do you fill the CS report properly?

1. Fill **Page 1** properly by reflecting your course details.
2. Make sure that ALL fields are filled and correct to the best of your knowledge.
3. The form should be filled according to the course details available from the IT Study Plan.
4. **Part A.6**: As SEU follows a blended teaching model, add 56 hours next to "Blended" with a 100% percentage.
5. **Part A.7**: In "Contact Hours", enter 28 hours for "Lectures" and 28 hours for "Others (Interactive learning)". This must be unified for all Course Specifications across the University. For "Other Learning Hours" enter the relevant hours for your course depending on the college.
6. **Parts B.1 and B.2**: Enter the course description and course main objectives as indicated in the Study Plan (or previous Course Specifications report).
7. **Part B.3**: Enter all relevant CLOs and their aligned PLOs from the Study Plan (or previous Course Specifications).
8. **Part C**: Fill in the topics of the course for each week and include the number of contact hours. The contact hours must be 4 hours for each week, excluding week 8, which should be zero hours. The total must be 56 hours.
9. **Part D.1**: Enter all CLOs and specify the Teaching Strategies and Assessment Methods will be used to achieve each CLO. Use the "Teaching Strategies and Assessment Methods" provided in Appendix B of this guide.
10. **Part D.2**: Enter the assessment tasks that will be used for the course. For example, "Coursework Assessments, Midterm Exam and Final Exam". In addition, indicate which weeks these tasks are due to take place and the percentage of the total score for each type. For example, "25/100".
11. **Part E**: Enter the arrangements made by the college to make sure faculty members are available to provide advice for students.
12. **Part F.1**: Enter all learning resources including textbooks, essential references, electronic materials and/or other learning materials that could be used for the course.
13. **Part F.2**: Enter the facilities required accordingly.
14. **Part G**: This part should be divided into two rows:

    The first row should be the evaluation of the student to the course and could be filled in as the following:

    a. **Evaluation Areas/Issues:** List the headings of the actual Course Survey sent to students such as: "Effectiveness of Teaching and Assessment, Quality of Learning Resources, Instructor's Interaction with Students, Blackboard Tools Efficiency, and Reasonability of Assessments' Grading".
    b. **Evaluators:** Enter "Students".
    c. **Evaluation Methods:** Enter "Indirect (Student Survey)".

    The second row should be the evaluation of faculty members and could be filled in as the following:

    a. **Evaluation Areas/Issues:** Enter "Effectiveness of Assessments", or similar name.
    b. **Evaluators:** Enter "Faculty Members".
    c. **Evaluation Methods:** Enter "Direct".
15. **Part E**: This part is filled by the "CCI Quality and Academic Accreditation Committee".

Chapter 3

Important Instructions when Preparing the Quality Files

Important instructions when preparing the Quality Files

Assessments

- Each assessment's question must be linked to a CLO.
- All assessment samples must contain the course title & code, and the student's name, ID, & CRN.
- Submit the required number of assessment samples (three samples per assessment). In case a section (CRN) has less than three students, the instructor should create and upload a file, for each missing sample, writing inside it: "This section has only # students". For example, "This section has only two students."

Midterm/Final Exams

- Each Midterm/Final exams' question must be linked to a CLO.
- All course CLOs must be linked to one (or more) questions of Midterm or Final exams.
- Submit the required number of samples (three samples per exam). In case a section (CRN) has less than three students, the instructor should create and upload a file, for each missing sample, writing inside it: "This section has only # students". For example, "This section has only two students."
- The exam file you export from *Examination system* must be readable, in Portrait format, and contains all questions.

Students Attendance Report

- Attendance report must be readable, in horizontal format, and show *all columns* in one sheet.

Course Report (CR)

- You reflect your section's details, marks, analysis, and recommendations to the CR that you will receive from the Course Coordinator.
- Add the number of withdrawn students to Part C.1 (take it from the Attendance report).
- In Part A, the number of students completed the course (appears in Part C.1) = the number of pass and fail students (i.e., all students excluding the withdrawn students).
- The numbers of students started the course and students completed the course (Part A) must match the corresponding values given in the Results part (Part C.1).
- The number of students started the course must match the total number of students in the attendance report (including the withdrawn students).
- The number of students completed the course must match the total number of students in the attendance report (excluding the withdrawn students).

- Do NOT change the common information between all course CRNs. This includes the following parts: **B.1** (Course Contact Hours), **B.2** (Topics not Covered), **B.3** (Teaching Strategies), **B.4** (Activities/Assessment Methods), **B.5** (Verification of Credibility of Students' Results), (The list of CLOs and the Target Level (70%) in **D.1**), **E.2** (Other Evaluations), and **G.1** (Course Improvement Actions).
- Do not remove **the Excel sheet** embedded in Part C.1 (just do a double-clicking to edit it and add the grades).
- The student absent in the Final Exam is considered "completed the course" (has grade F).
- After you add all grades, If any percentage cell appears as ###, then kindly select the cell you want to adjust, go to **Home** tab of the ribbon, from **Cells** group choose **Format** then click on **AutoFit Column Width**.
- Give appropriate comments on the students results part (Part C.2).
- Fill Part D.1 & D.2 properly.
- Fill Part E (Course Quality Evaluation) properly and upload the Course Evaluation Survey you will receive from quality@seu.edu.sa. If the survey report is not available, then your students did not fill it, kindly write "the students of this section did not fill the survey report". If students did not give any suggestions, then write "No suggestions were given by the students". If the suggestions are in Arabic, then refer to the course coordinator if you need any assistance in translation.
- Fill Parts F and G properly.

Keep in mind that double-checking your files will definitely avoid mistakes.

Repeated Mistakes

- Uploading samples with missing/incorrect student details.
- Uploading samples with missing/incorrect section details.
- Mismatching in data among the same course files.
- Leaving fields empty.
- Registering No-lecture Weeks (Week 8 & sometimes Week 15**)** in the attendance system.

Appendices

Appendices

Appendix A: Sample of Online Quiz's Cover Page
Appendix B: Teaching Strategies and Assessment Methods

Appendix A: Sample of Online Quiz's Cover Page

College of Computing and Informatics

Software Engineering IT242

ONLINE QUIZ 1

Date: Wednesday 30/09/2020

[Total Marks for this Quiz are 2]

Student Details

Name: ### **ID:** ####

CRN: ###

Appendix B: Teaching Strategies and Assessment Methods

This appendix encompasses three parts:

Part A: Suggested Teaching Strategies

Part B: Suggested Assessment Methods

Part C: Example that links teaching strategies and assessment methods together (taken from one CCI courses)

Part A: Suggested Teaching Strategies

	Teaching strategy	Brief Description
1.	Group teaching (F2F Lectures)	Give lectures to students accompanied by tutorials
2.	Active learning (group-work case study, problem-solving exercises)	Explore teaching and learning methods that put students in charge of their own learning through meaningful activities
3.	Problem based learning (assignments, projects)	Students learn about a subject through understanding and solving problems
4.	Virtual sessions	Online learning and independent study
5.	Class Discussion	Support a lesson with a group discussion to refresh students, memories about the assigned readings, or generate a set of questions stemming from the assigned readings
6.	Work based learning	Provide students the opportunity to learn through real-life work experiences. Examples: internships, job shadowing or field trips
7.	Demonstrating in practical classes	Explore the key learning aims of practical classes and how to get learners to effectively engage with them. Examples: undertake experiments; tackle problem-solving exercises; carry out survey and project work and experience at firsthand how the theory and principles of their discipline are applied
8.	Student-led learning	Students work together to support each other's learning
9.	Cooperative Learning	Small groups of students to work together for the achievement of a common goal. Examples: developing learning communities, stimulating student/faculty discussions
10.	Integrating Technology	Use electronic mail or on-line notes in learning
11.	Lab Teaching	A class in lab
12.	Experiential Learning	Learn by doing
13.	Service Learning or Communitybased learning	Combine classroom instruction, engaged student learning, meaningful service in the community, and personal reflection
14.	Inquiry-Based Instruction	Students learn by asking questions, investigating, exploring, and reporting what they see
15.	Role playing and simulations	Using a model of behavior to gain a better understanding of that behavior, or the spontaneous acting out of situations, without costumes or scripts. Example, a mock job interview, engage
		students in a simple simulation of specialization and division of labor
16.	Collaborative Testing	Students rely on the knowledge of others; providing students the opportunity to take multiple-choice exams in a group or in pairs. This testing approach allows students to discuss the materials and “teach each other

17.	Just-in-time teaching	Learning through two-steps. Step 1: students complete a focused set of activities outside of class and submit their work to the instructor. Step 2: the instructor (often just hours before the next lecture) collects the students' responses and identifies areas of understanding and misunderstanding to adjust the next lesson so that students can receive specific "just-in-time" feedback on those particular areas
18.	Flipped classroom	Consider a 'flipped' approach by asking learners to watch video content before the class session, and devote in-class time to exercises, projects and discussions

Important Remark:

Kindly refer to the QA Office at SEU (Ms. Amal Alshathri, aalshthri@seu.edu.sa) if you would like to suggest/use any other teaching strategy not mentioned in the table above.

Part B: Suggested Assessment Methods

1. Assignments
2. Online Quizzes
3. In-class Quizzes
4. Discussion boards
5. Case Study
6. Project
7. Presentation
8. Practice exams
9. Midterm and final exams

Important Remark:
Kindly refer to the QA Office at SEU (Ms. Amal Alshathri, aalshthri@seu.edu.sa) if you would like to suggest/use any other assessment method not mentioned in the list above.

Part C: Example

Below is an example taken from one of IT courses.

Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge**		
1.1	Explain different software processes and how to choose between them.	• Group teaching (F2F Lectures) • Virtual sessions • Class discussions	• Assignments • Quizzes • Midterm and final exams
2.0	**Cognitive Skills**		
2.1	Design in the large, including principled choice of a software architecture, the use of modules and interfaces to enable separate development, and design patterns.	• Group teaching (F2F Lectures) • Virtual sessions • Class discussions • Active learning (group-work case study)	• Assignments • Case Study • Quizzes • Discussion boards • Midterm and final exams
2.2	Demonstrate various quality assurance techniques, including unit testing, functional testing, and automated analysis tools.	• Group teaching (F2F Lectures) • Virtual sessions • Class discussions • Active learning (group-work case study)	• Assignments • Quizzes • Midterm and final exams
3.0	**Interpersonal Skills & Responsibility**		
3.1	Elicit requirements from a client and specify them.	• Group teaching (F2F Lectures) • Virtual sessions • Class discussions • Active learning (group-work case study)	• Case Study • Midterm and final exams • Case Study
4.0	**Communication, Information Technology, Numerical**		
4.1	Apply good coding practices, including documentation, contracts, regression tests and daily builds.	• Group teaching (F2F Lectures) • Virtual sessions • Class discussions	• Assignments • Quizzes • Midterm and final exams