Ripah International University
Prepared by Technology Enhanced Education Committee
Ripah Online Guidelines v1.0 6-Mar-2020

RIPHAH ONLINE
EDUCATION GUIDELINES

FOR EFFECTIVE ONLINE TEACHING

Guidelines for online course delivery, examinations and quality enhancement through active monitoring and review
TABLE OF CONTENTS

Contents

I. Online Education at Riphah ___________________________________________ 1
II. Guidelines for the Faculty Members ___________________________________________ 6
III. Guidelines for Online Course Design ___________________________________________ 8
IV. Guidelines for Conducting Live Sessions ___________________________________________ 11
V. Guidelines for End Semester Evaluation ___________________________________________ 12
VI. Guidelines for Effective Use of Moellim ___________________________________________ 14
VII. Managing Online Learning and Teaching ___________________________________________ 16
Appendix A – Technology Enhanced Education Committees ___________________________________________ 18
Appendix B – Moellim Log Template ___________________________________________ 21
References and Bibliography ___________________________________________ 22
I. Online Education at Riphah

1. ADAPTATION OF ONLINE EDUCATION AT RIPHAH
   As a result of recent policy of Riphah International University to move its classes online, there is a need for uniform guidelines for meaningful implementation of e-learning. This document aims to provide guidelines, policy matters and quality control mechanisms that have been developed to achieve this goal.

2. SCOPE
   The document aims to provide broad guidelines for the faculty members, Examination Department, Quality Enhancement Cell and the university management. It may be noted that this document does not form part of the university regulations. All the guidelines provided in the document should be followed in the light of exiting or any future rules and regulations of university, professional/higher education regulatory bodies/governing bodies. These guidelines cover all forms of online education including distance and blended learning, where part of the course is online and rest of the course is delivered in face-to-face interaction.

3. LEARNING MANAGEMENT SYSTEM
   A learning management system (LMS) in educational technology is a web-based platform for digital aspects of courses of study, usually within educational institutions. These managements systems:
   - Allow participants to be organized into cohorts, groups and roles
   - Present resources, activities and interactions within a course structure
   - Provide for the different stages of assessment
   - Report on participation; and have some level of integration with other institutional systems

4. MOELLIM – LEARNING MANAGEMENT SYSTEM @ RIPHAH
   The learning management system at Riphah is based on an open source system called Moodle. The system has been customized and deployed at Riphah and is referred to as Moellim (https://moellim.riphah.edu.pk). Moodle has a number of features that support most of the pedagogical approaches associated with e-learning. At the heart of Moodle is courses that contain activities and resources. There are about 20 different types of activities like forum, glossaries, wikis, assignments, quizzes, choices (polls), SCORM players, databases, etc.) and each can be customized to the needs of the learning objectives of the course. A comprehensive set of guidelines for preparing high quality online courses are provided in Section III.
5. ASYNCHRONOUS VS SYNCHRONOUS MODE OF TEACHING

In the synchronous mode of teaching the course contents can be delivered in one of the two ways. In a live session, face-to-face classroom environment can be simulated in live delivery of lectures. In this synchronous mode teacher can interactive with connected students through video links using tools like Zoom and MS Teams. In the asynchronous mode of teaching in place of live sessions, the teacher may deliver lectures through recorded material, online resources, learning activities and assessment items uploaded on a learning management system.

The following points may be considered while designing online sessions.

- Having students participate in live sessions can be useful, but scheduling could be a problem, and only a few students will actively participate (as is the case in physical classroom).
- In asynchronous mode of teaching using learning management system, students participate on their own time. Bandwidth requirements for discussion boards are far lower than for live video tools.

6. ONLINE EXAMINATION

A comprehensive online examination policy has been developed by the university. The main features of the policy are listed below.

1. SESSIONAL ASSESSMENTS (70%) – A student will be evaluated in each course on the basis of periodical quizzes/assignments/essays questions/exercise/MCQs and other such assessment items. The distribution and frequency of sessional assessments will be determined by the concerned faculty members and will be clearly communicated to the students with the course plan. It may be noted that there will be no mid-term in sessional assessments.

2. PARTICIPATION (10%) – Faculty members will record the attendance and active participation of students in online activities every week. Based on the attendance in 70% of online lectures and active participation in online learning activities like quizzes, discussion forums, and assignment submission.

3. END SEMESTER Examination (20%) – The end semester assessment can be conducted provided following conditions are met.
   i. **Option 1** – A limited-time take-home examination will be conducted as final evaluation. The Dean will approve this option, provided:
      1. The examination has been prepared by the faculty member using Open Book Examination Guidelines (Section V).
      2. A clearly defined assessment rubric has been developed and approved by the HoD.
   4. The assessment rubric has been shared with the students ahead of time.
   i. **Option 2** – An end term project/research report is allowed by the Dean in place of take-home examination mentioned in Option 1 provided:
I. ONLINE EDUCATION AT RIPHAH

1. A clearly defined assessment rubric has been developed using end term report guidelines by the faculty member.
2. The assessment rubric has been approved by the HoD.
3. The assessment rubric has been shared with the students at the time of giving the project/research report to the student.

ii. Viva Voce Examination – In case of any doubt in the online take-home examination or end-term project/research report, the concerned teacher can take a viva-voce examination of short duration (10 to 15 minutes). This is just to clear any doubt of a particular student. The whole session must be properly recorded to provide evidence as and when required. In case of use of any unfair means, the teacher will report the case to controller of examination through email.

iii. Failure to Take the Examination – If a student fails the final examination (Option 1 or Option 2 above) due to any reason, he/she will be treated as absent and failed. However, in special circumstances, on the request of the student, the Dean of the concerned faculty may allow for the grade 'I' on the recommendation of the concerned teacher. The prerequisite of such a scenario is that the student’s attendance and other requirements in the course have been completed.

iv. Project/Thesis Defense – A viva voce examination of the candidate shall be conducted through video link. Presence of all members of Examination Committee must be ensured in the online session. The session must be properly recorded to provide evidence as and when required.

7. TECHNOLOGY ENHANCED EDUCATION COMMITTEE

Riphah International University has constituted a ten-member Technology Enhanced Education Committee to provide supervision to the Online Education at Riphah. The constitution of the committee and their contact details are provided in Appendix A. The responsibilities of the committee include.

- Develop Online Education policies, rules and regulations
- Recommend and monitor required technical support for Online Education
- Develop and implement capacity building programs for Online Education
- Develop and implement quality enhancement mechanism for Online Education

8. ONLINE EDUCATION TECHNICAL SUPPORT SUB-COMMITTEE

The university has also constituted a technical support committee for technical evaluation and support for Online Education at Riphah. The name and contact details of the committee members are provided in Appendix A.
I. ONLINE EDUCATION AT RIPHAH

9. E-LEARNING CAPACITY BUILDING SUB-COMMITTEE
An e-Learning subcommittee has been formed for capacity building of faculty members for effective online education. The composition of the committee along with their contact details are in Appendix A. The sub-committee has developed incremental training programs for the Riphah faculty. Specialized advanced level courses are being developed in consultation and in the light of specific needs of the faculty members. The following three preliminary courses developed by the committee are provided below. It is mandatory for all the faculty members to participate in these capacity building courses.

1. BASICS OF MOODLE (MOELLIM)
2. ONLINE COURSE DESIGN FUNDAMENTALS
3. HOW TO TEACH ONLINE

10. THREE-MEMBERS DEPARTMENTAL COMMITTEES
A 3-members departmental committees have been formed to ensure coordination and effective implementation of Online Education at Riphah. The main role of the 3-members committee is to:

1. Ensure compliance of online education policies at the respective faculties.
2. Identify requirements of capacity building and report compliance
3. Assist Quality Enhancement in Qualitative assessment of online courses

11. ONLINE EDUCATION QUALITY ENHANCEMENT MECHANISM
To ensure continuous improvement of online education at Riphah, the Quality Enhancement Cell (QEC) has developed a mechanism of monitoring and improving the quality of courses online. The role of QEC is provided below.

1. COURSE LOG REVIEW: The course logs that are embedded in every course in Moellim are compiled and share with the concerned Dean/HoD and the departmental 3-member committee to identify compliance and areas of improvement. The course log template is attached as Section II.4.

2. MOELLIM LOG REVIEW: The weekly activity generated automatically from the online courses on Moellim is compiled and shared with the concerned Dean/HoD and the departmental 3-member committee to identify compliance and areas of improvement. The activity log report template is attached as Appendix B.

3. QUALITATIVE REVIEW OF ONLINE COURSES: QEC will conduct semesterly quality review of the online courses with the help of 3-member departmental committees. A qualitative review based on Blackboard Exemplary Course Rubric will be used as a guideline for conducting the review. The rubric template will be customized and made part of this document soon.
12. HANDS-ON LAB WORK AND PRACTICAL TRAINING

The university recognizes that some aspects of the training in a course cannot be delivered online due to the limitation of the technology, availability of resources or capacity of the faculty members. In such cases, a plan should be submitted by the faculty members through concerned Dean and communicated to the students, outlining:

1. Alternate to practical (if possible)
2. Details of hands-on lab work or practical training required
3. Date, time and place of planned lab work or practical training (tentative)
4. A completed course plan with the aforementioned details
5. Instead of Hands-on lab work, the lab engineers or faculty members could go to the lab physically and perform live or demonstration on the device/instrument in order to attain an acceptable level of psychomotor domain experience. These labs could be designed by considering the first three levels of Psychomotor domain i.e.; Perception, Set, and Guided response.

13. FINAL-YEAR PROJECT/THESIS SUPERVISION

In cases where online supervision of final-year projects, MS/PhD theses is possible, supervisors are required to perform the following tasks to ensure that a complete record of supervisory sessions is maintained.

1. All the FYP/thesis students assigned to a supervisor will be enrolled in a Moellim course.
2. A regular online meeting schedule will be uploaded on the course page with clear instructions to the student on how and when the meeting will take place.
3. A complete record of the meeting is recorded in the weekly course log.
4. Minutes/key points/tasks assigned to the student will be uploaded on Moellim.
5. Any reading assignments or resource materials will also be uploaded on Moellim.
6. The student will share their progress reports on weekly basis through Moellim.
7. The report/thesis drafts will be uploaded on Moellim.
8. Detailed feedback on the submitted drafts will be provided to the student through Moellim.

14. COMPLIANCE WITH REGULATORY REQUIREMENTS

Any bidding regulatory requirements of the regulatory bodies including the Higher Education Commission, Pakistan Engineering Council, National Computing Education Accreditation Council (NCEAC), etc. will overrule the guidelines given in this document.
II. Guidelines for the Faculty Members

1. ROLE OF THE FACULTY MEMBERS
   As in the traditional education, the role of the teaching staff is pivotal in ensuring high standards of education is being delivered to the students. In the context of this document, the faculty members are expected to perform the following specific tasks to ensure minimum level of quality is delivered in the online courses.

   I. Professional development in online teaching and learning
   II. Participation in capacity building programs
   III. Follow online course design guidelines
   IV. Follow online lecture delivery guidelines
   V. Follow student engagement guidelines
   VI. Develop and share course plans
   VII. Develop and share weekly lesson plans
   VIII. Log weekly course activities
   IX. Record student participation and attendance
   X. Report any issues, challenges and non-compliance
   XI. Follow examination policy for developing assessment items
   XII. Evaluate their teaching sessions through students’ feedback
   XIII. Review QEC reports and develop and share improvement plan
   XIV. Understand the qualitative online course evaluation rubric

2. PROFESSIONAL DEVELOPMENT IN ONLINE TEACHING AND LEARNING
   E-learning pedagogy is an evolving area of knowledge. It is important that all faculty members engaged in teaching online should commit themselves to professional development. It is also their duty to recognize that some aspects of teaching may be inherently different from face-to-face teaching. Among many other resources the following text may be a good point to start.


3. PARTICIPATION IN CAPACITY BUILDING PROGRAMS
   All the faculty member that are engaged in online teaching are required to participate in capacity building program to ensure minimum skill levels. The university may offer new programs or develop on-demand courses or workshops on capacity building. Participation in the following three courses is mandatory.

   1. BASICS OF MOODLE (MOELLIM)
   2. ONLINE COURSE DESIGN FUNDAMENTALS
II. GUIDELINES FOR THE FACULTY MEMBERS

3. HOW TO TEACH ONLINE

4. LOG OF WEEKLY ACTIVITIES

All the faculty members are required to log their weekly activities in a course log on Moellim. The link to the course log is present on the main dashboard of every Moellim teacher. The following information is required to be filled in the log:

- Weekly plan shared (Yes/No)
- Online resource material uploaded (Yes/No)
- Number of live sessions scheduled (Number)
- Live session held (Yes/No); if yes:
  - Session date, session time, session duration
  - Number of participants
  - Name of the video conferencing tool used
- Assessment items used; if yes:
  - Type of assessment item(s) used (descriptive)
- Student engagement strategy used [WhatsApp, discussion forum, etc.] (descriptive)
- List of topics covered
- Summary of weekly learning activities upload (Yes/No)
- Any other e-Learning tools used
- Issues faced or improvement suggestions (Descriptive)

5. STUDENT ENGAGEMENT STRATEGIES

Faculty members are encouraged to engage with the students in a variety of ways. Following suggestions may help engage with the students in an effective manner:

- Create a WhatsApp group to communicate with the students
- Personalize your course page with self-introduction and welcome message
- Create discussion forums for engaging with you and other students
- Encourage them to share their issues and challenges
- Provide instant feedback to the queries and assessment items
- Guide and help them with their online challenges
- Guide and help them with their administrative problems
- Point them to online resources and help
III. Guidelines for Online Course Design

To promote excellence in online teaching and learning, Riphah has compiled these guidelines based on the recognized best practices established at other renowned organizations. Specifically, the guidelines in this section are based on the recommendations of Quality Matters (QM). This will help ensure that the online courses developed at Riphah are of high quality and support the success of the students.

I. **Standard 1: Getting Students Started for Online Course**
   - Create a welcome or informative page as a course entry point
   - Create a course tour
   - Create an introduction of yourself
   - Students have specific steps on how to get started
   - Students are introduced to the purpose, structure, and policies of the course
   - Students have an opportunity to interact with each other early and are provided with etiquette expectations
   - Technology requirements are clearly stated and instructions are provided
   - Provide students with information on the prerequisite knowledge required for this course
   - Provide students with information on the expected technical skills required for this course

II. **Standard 2: Stating Learning Objectives**
   - Course and module level objectives describe what students will learn
   - Course and module level objectives are written from the student’s perspective with student-friendly language
   - Course and module level objectives are observable – you may choose to use Bloom’s taxonomy and action verbs
   - Course and module level objectives are measurable
   - Course and module level objectives are appropriate for the level of course
   - Learning objectives are clearly communicated to the students
   - Course learning objectives form a foundation for the rest of the course design, to align with assessments, materials, activities, and technology
   - Module learning objectives support the course level objectives
   - The relationship between the learning objectives and the other alignment components is clearly communicated throughout the course (not just in the syllabus)

III. **Standard 3: Assessing and Measuring Learning Objectives**
   - Assessments align with learning objectives, both course and module level
   - There are multiple opportunities (a variety of assessments) for student to demonstrate understanding
   - Assessments include frequent opportunities for students to receive feedback on their progress and performance from instructors, other learners, or self-checks such as practice or multiple attempt assessments
III. GUIDELINES FOR ONLINE COURSE DESIGN

- Assessments are sequenced to build on earlier concepts and paced to allow students sufficient time for mastery
- Grading policy clearly explains how assessments will be graded and how course grades are calculated
- Specific criteria and expectations are provided to explain how student work will be evaluated and are tied to the grading policy
- Course includes a method for students to view and track their progress
- Create rubrics for all assessments or groups of assessments
- Include a table to demonstrate how assessments align with course and module level objectives

IV. Standard 4: Developing Course Content and Instructional Material
- Explain the purpose of instructional materials so students understand why and how to use the materials
- For each module, the sequence of instructional materials is obvious
- If students will be finding their own resources, provide guidelines for how students should evaluate and select resources
- Provide appropriate academic citations for instructional materials
- Instructional materials are current and represent up-to-date practice in the field, or are historical or seminal to the discipline
- The course content and instructional materials represents diverse perspectives
- The course content and instructional materials offers student choice and multiple modalities
- If offered, optional materials are clearly marked
- Course content and instructional materials contribute to the course and module learning objectives

V. Standard 5: Designing Course Activities and Learner Interaction
- The course design includes opportunities for students to interact with you through active learning activities
- The course design includes opportunities for students to interact with each other through active learning activities
- The course design includes opportunities for students to interact with the content through active learning activities
- Somewhere in the course or syllabus you have explained how you will provide feedback on assignments and how quickly students can expect that feedback
- Somewhere in the course or syllabus you have explained what days/times and how quickly you will respond to student emails as well
- If the course uses discussion board assignments, you have explained how often you plan to reply to student posts
- The course or syllabus clearly states the requirement and expectations for student interaction
III. GUIDELINES FOR ONLINE COURSE DESIGN

- Course learning activities promote the achievement of course and module learning objectives

VI. **Standard 6: Integrating Technology in Course Design**
- The technologies provide opportunities for students to interact with you
- The technologies provide opportunities for students to interact with each other
- The technologies provide opportunities for students to actively engage with the content instead of passively absorbing information
- The computer peripherals required for the course are easy for students to purchase, like webcams or microphones, and required specifications are provided
- The course contains instructions on how to purchase, download, and install any required software or plug-ins
- Somewhere in the course or syllabus you have explained what days/times and how quickly you will respond to student emails as well
- If the course uses discussion board assignments, you have explained how often you plan to reply to student posts
- Technologies chosen support students in achieving the course and module objectives

VII. **Standard 7: Providing Learner Support**
- The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.
- Course instructions articulate or link to an explanation of how the institution’s academic support services and resources can help learners succeed in the course and how learners can obtain them.
- Course instructions articulate or link to an explanation of how the institution’s student services and resources can help learners to succeed and how learners can obtain them.
IV. Guidelines for Conducting Live Sessions

In a live session, face-to-face classroom environment can be simulated in live delivery of lectures. In this synchronous mode teacher can interact with connected students through video links using tools like Zoom and MS Teams. Having students participate in live sessions can be useful, but scheduling can be a problem, and only a few students will activity participate (as is the case in physical classroom). Furthermore, there can be internet connectivity and low bandwidth challenges. However, if such an activity is planned in a course, then a number of points must be adhered to as highlighted below. The following guidelines are described for MS Teams but can easily be followed with other video conferencing tools.

1. BEFORE THE LIVE SESSION
   - A recurring meeting should be setup in MS Team Calendars
   - Confirm that all the students have been added as Attendees so that they are not able to control the microphone
   - Check your internet connectivity before the class starts
   - Ensure that your computer and internet device is fully charged
   - Login MS Teams at least 10 minutes prior to class time
   - Make sure that all the relevant resources including MS Powerpoint presentation, notes, reading material have been uploaded on MS Teams and in the relevant section of Moodle.
   - Clear live session etiquettes and other expectations from the students have been communicated to the students through Moellim, MS Teams, WhatsApp message.

2. DURING THE LIVE SESSION
   - A record of attendance is maintained for the session
   - Use headphones for clearer audio connection
   - Request each student to turn their microphones to mute during the lecture. They can unmute for questions and then turn it back to mute.
   - Request your students to turn off their video.
   - Ask your students to type all their questions in the chat box.
   - Video record your live session.
   - Inform your students that the session is being recorded to address privacy concerns.

3. AFTER THE CLASS
   - Review the comments in the chat box and answer any unanswered queries.
   - Summarize and upload the key points and answers to the query on Moellim.
   - Make sure to fill in the course weekly log in Moellim
   - Record any difficulties or suggestions for improvement in the course weekly log
V. Guidelines for End Semester Evaluation

1. GUIDELINES FOR TAKE-HOME OPEN BOOK EXAM

In an online course the instructors may design the examination based on the guidelines of take-home open book exam. The main objective of an open book exam is that teachers can devise questions that require students to answer in more critical and analytic ways thus encouraging high-order thinking skills in their students; as compared to closed book or traditional exams that tend to encourage rote learning and more superficial application of knowledge.

I. Main considerations in designing open book exams

- Questions in open book exams need to be devised to assess the interpretation and application of knowledge, comprehension skills, and critical thinking skills rather than only knowledge recall
- Make use of case-based exam questions that require students to apply critical reasoning skills in response to trigger scenario
- Devise clear and unambiguous questions to limit student confusion and time spent interpreting the question so students can spend their time making use of their textbook or any other resource to effectively answer the questions
- Devise questions that require students to apply and make use of the information from their textbook or notes rather than simply requiring them to locate and re-write this information
- Design your questions and overall exam paper with learning outcomes in mind, that is, what skills knowledge are you assessing?

II. Guidelines for Designing Open Book Exam Questions

- Structure your exam questions around problem-based scenarios or real-world cases, requiring students to apply their skills and knowledge to the given problem or scenario
- Provide information or background information on a given topic or area of study
- Present relevant qualitative or quantitative data and then ask students interpretative and application questions – What does the data show? What relevance does this data or does the scenario have in terms of the topic? What other factors could potentially affect this data? How would you test for these?
- Structure content or topic questions in a way that tests for an ability to apply, analyze, evaluate, create, synthesize, interpret, etc.
- When devising questions to probe student understanding, skills and knowledge, the questions should correspond to the levels and stages of learning.
2. GUIDELINES FOR DEVELOPING INSTRUCTIONS FOR END TERM PROJECT/RESEARCH REPORT

The following guidelines should be adhered to for assigning an end term project/research report.

- A clear problem statement should be given to the student.
- The format of the report including required sections, author information, font, citation style and page and/or word limit should be included in the instructions.
- The plagiarism policy and consequences of violations should be communicated to the students.
- The sufficient time should be given to the students.
- You should communicate regularly with the students and guide them on key elements of the report during the writing of the report.
- A clearly defined rubric should be developed and shared with the students with the instructions.

3. GENERIC ASSESSMENT RUBRIC FOR END TERM PROJECT/RESEARCH REPORT

A sample generic assessment rubric for end term project/research report will be customized and added to this document in the near future.
VI. Guidelines for Effective Use of Moellim

1. MOELLIM FOR EFFECTIVE ONLINE TEACHING

The main advantage of the activity-based model of Moodle comes through combining the activities into sequences and groups, which can help you guide participants through learning paths. This can help build on the outcomes of subsequent activities of previous ones. Some of the key features of Moodle that educators can exploit for enriching their course are listed below.

- Many activities in Moodle are designed to allow students to control common content such as forums, wikis, glossaries, databases and messaging. This encourages students to add to the total course experience for others.
- The Moodle course page is the main tool for a teacher that allows them to add/remove and structure activities as necessary. The user-friendly interface allows for activities, sections and blocks to be dragged-and-dropped. The activities can be restricted according to time, conditions, or user profiles.
- User roles can be applied individually in every context across the site so that you want to create one single quiz where everyone has access to everybody's results, or allow parents of students to see parts of the students' course.
- Navigation around the course and site is automatically generated.
- The gradebook is automatically maintained, and reflects the activities in the course at any given time.
- There are preferences for many aspects of appearance and behavior, at site, course and activity levels, allowing educators to fine-tune the behavior of Moodle in many ways.
- Many external systems like, campus management system, can be integrated easily, to maintain authentication, enrolments and other things, allowing Moodle to react smoothly as data in other systems is modified.

2. MOELLIM SKILLS PROGRESSION

For faculty members new to teaching online, learning to teach online can be a daunting task. Therefore, it is advisable to design their courses according to their skill levels. As they progress down the skill sets, they can experiment with more advanced features to enrich their course. The following list indicates some of the skills that teachers can use a guideline to gradually enhanced the skill levels of Moodle features. The faculty members should progress through the listed levels as they develop their expertise with Level 1 being easier to achieve than the subsequent levels.

LEVEL 1. Uploading course material and handout (Resources, SCROM)
LEVEL 2. Providing a passive course content (unfacilitated)
LEVEL 3. Incorporating quizzes and assignments (with less management)
LEVEL 4. Using the Wiki, Glossary and Database tools (interactive content)
LEVEL 5. Facilitating discussion in Discussion Forums, asking questions and guiding the students
VI. GUIDELINES FOR EFFECTIVE USE OF MOELLIM

LEVEL 6. Combining activities into sequences, where results feed later activities
LEVEL 7. Introducing external activities and gamification of learning activities
LEVEL 8. Using the Survey module to study and reflect on course activity
LEVEL 9. Using peer-review modules like Workshop, giving students more control over grading and even structuring the course
LEVEL 10. Conducting active research on the course to improve teaching and sharing the experiences with peers
VII. Managing Online Learning and Teaching

1. How to Manage Online Learning and Teaching

There are two kinds of online learning and teaching that faculty members will need to balance based on their circumstances: synchronous (happening collaboratively and at the same time with a group of online learners and usually a teacher) and asynchronous (happening at any time, not necessarily in a group, but with teacher feedback).

Faculty members should not assume that synchronous teaching is required or even desirable in order to support effective learning. The goal is not to try to re-create face-to-face (F2F) classrooms, which is impossible to do. Online and blended learning provide opportunities for learners to work more independently, expand their agency, and learn to use tools and strategies that they otherwise might not have. While it is not recommended to experiment in emergency situations, innovation, creativity and resilience are required to make things work. Most faculty members will discover they need to be adaptive and fast-thinking in order to ensure that learning continues in a healthy way.

2. How to Ensure Students Are Not Disadvantaged by Online Teaching

Effective online teaching is not the same as face-to-face (F2F). It is not a matter of whether it is equal. It requires different activities, some which are better done online. However, learners become disadvantaged if they are not provided with certain resources for learning independently and online:

- **Access to devices appropriate for online learning.** Some learning activities can be conducted using mobile devices.
- **Internet access and adequate bandwidth (speed).** Poor bandwidth can make many synchronous activities very difficult. For students in poor bandwidth areas, a combination of asynchronous activities and telephone check-ins provides more support.
- **Class decorum to be defined for engagement.** If meeting times are combined with collaborative activities, students are more likely to log on and complete tasks or discussions by engaging with teacher. When 5 students unmute and speak simultaneously teacher can’t understand who to address. A 15-minute cycle of writing questions down and being answered accordingly after 15 minutes may be introduced while controlling the flow of stream of questions
- **Effective feedback.** Checking in with learners regularly is important. Students can also get valuable feedback automatically from online quizzes and intelligent tutors as well as direct comments or discussion from peers and teachers.
- **Opportunities for independent learning.** Wherever they are, students are learning informally every day. Designing learning activities and discussions that capture students’ experiences while they are away keeps them engaged and gives teachers valuable feedback on how the students are feeling. It also provides opportunities for multiple perspectives in learning that might not happen if students were all physically together.
VII. MANAGING ONLINE LEARNING AND TEACHING

3. HOW CAN TEACHERS AUTHENTICATE WORK THAT IS BEING COMPLETED REMOTELY?

It is easier to authenticate student work online than most people think. However, it requires some changes to how assignments are presented and submitted for review. It also requires teachers to monitor students’ online activity more closely than in normal classroom situations.

Here are some basic guidelines to designing and evaluating online work for authenticity:

- **Use more formative assessments** that are designed to get students to work together and use online resources.
- **Have a very clear policy on how to submit work online.** Students who are given a precise procedure are less likely to make mistakes in submissions, which accounts for many online learning integrity violations.
- **Create more assignments that are collaborative.** If the teacher is working directly with groups of students on their work, it is far easier for the teacher to monitor what the students are doing and to check their understanding.
- **Create questions and inquiries that require learners to embed their personal experiences** and context into any assessed content. Since many online students will be in different locations, it will be easier for the teacher to see when a student is using their surroundings to compose their work.
- **Use plagiarism checkers** whenever students have to submit individual work and assign drafts of parts of the work prior to a final submission. Most plagiarism checkers can accept drafts of assignments to check against final submissions.
- **Interview students** about their work using a synchronous chat with audio or video feeds, if possible. It is much more difficult to produce spontaneous answers when talking online.
Appendix A – Technology Enhanced Education Committees

1. TECHNOLOGY ENHANCED EDUCATION COMMITTEE

<table>
<thead>
<tr>
<th>NO</th>
<th>NAME</th>
<th>DESIGNATION</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prof. Dr. Saad Zafar</td>
<td>Deputy Vice Chancellor (Academics)</td>
<td><a href="mailto:saad.zafar@riphah.edu.pk">saad.zafar@riphah.edu.pk</a></td>
</tr>
<tr>
<td>2.</td>
<td>Mr. Umer Farooq</td>
<td>Director Lahore Campus</td>
<td><a href="mailto:umer.farooq@riphah.edu.pk">umer.farooq@riphah.edu.pk</a></td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Hafiz Hameedullah</td>
<td>Director Faisalabad Campus</td>
<td><a href="mailto:hafiz.hameedullah@riphah.edu.pk">hafiz.hameedullah@riphah.edu.pk</a></td>
</tr>
<tr>
<td>4.</td>
<td>Mr. Sarfraz Haroon</td>
<td>Director IT</td>
<td><a href="mailto:sarfraz.haroon@riphah.edu.pk">sarfraz.haroon@riphah.edu.pk</a></td>
</tr>
<tr>
<td>5.</td>
<td>Mr. Muhammad Farooq</td>
<td>Director Information Services Dept.</td>
<td><a href="mailto:mufarooq@riphah.edu.pk">mufarooq@riphah.edu.pk</a></td>
</tr>
<tr>
<td>6.</td>
<td>Dr. Muhammad Zubair</td>
<td>HoD, Faculty of Computing</td>
<td><a href="mailto:mzubair@riphah.edu.pk">mzubair@riphah.edu.pk</a></td>
</tr>
<tr>
<td>7.</td>
<td>Dr. Khurram Shahzad</td>
<td>Dean, Faculty of Management Science</td>
<td><a href="mailto:khurram.shahzad@riphah.edu.pk">khurram.shahzad@riphah.edu.pk</a></td>
</tr>
<tr>
<td>8.</td>
<td>Dr. Muhammad Shafique</td>
<td>HoD Biomedical Engineering</td>
<td><a href="mailto:muhammad.shafique@riphah.edu.pk">muhammad.shafique@riphah.edu.pk</a></td>
</tr>
<tr>
<td>9.</td>
<td>Dr. Raheela Yasmin</td>
<td>Department of RARE</td>
<td><a href="mailto:raheela.yasmin@riphah.edu.pk">raheela.yasmin@riphah.edu.pk</a></td>
</tr>
<tr>
<td>10.</td>
<td>Brig (R) Engr. Salim Ahmed Khan</td>
<td>Director, Quality Enhancement Cell</td>
<td></td>
</tr>
</tbody>
</table>

2. TECHNICAL SUBCOMMITTEE

<table>
<thead>
<tr>
<th>NO</th>
<th>NAME</th>
<th>DESIGNATION</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mr. Aurangzeb Ahmed</td>
<td>Head, Enterprise Applications</td>
<td><a href="mailto:aurangzeb.ahmad@riphah.edu.pk">aurangzeb.ahmad@riphah.edu.pk</a></td>
</tr>
<tr>
<td>2.</td>
<td>Mr. Ali Raza Niamati</td>
<td>Assistant Director Max Strategy</td>
<td><a href="mailto:ali.raza@riphah.edu.pk">ali.raza@riphah.edu.pk</a></td>
</tr>
<tr>
<td>3.</td>
<td>Mr. Asghar Malik</td>
<td>Head Enterprise Infrastructure &amp; Networks</td>
<td><a href="mailto:asghar.malik@riphah.edu.pk">asghar.malik@riphah.edu.pk</a></td>
</tr>
<tr>
<td>4.</td>
<td>Mr. Khurram Ahmed</td>
<td>Project Manager Academic Systems</td>
<td><a href="mailto:khurram.ahmad@riphah.edu.pk">khurram.ahmad@riphah.edu.pk</a></td>
</tr>
<tr>
<td>5.</td>
<td>Mr. Shahid Mehboob</td>
<td>Senior Manager F&amp;D</td>
<td><a href="mailto:shahid.mehmood@riphah.edu.pk">shahid.mehmood@riphah.edu.pk</a></td>
</tr>
</tbody>
</table>

3. E-LEARNING SUBCOMMITTEE

<table>
<thead>
<tr>
<th>NO</th>
<th>NAME</th>
<th>DESIGNATION</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Raheela Yasmin</td>
<td>Professor, RARE</td>
<td><a href="mailto:raheela.yasmin@riphah.edu.pk">raheela.yasmin@riphah.edu.pk</a></td>
</tr>
<tr>
<td>2.</td>
<td>Mr. Tuffail Abbasi</td>
<td>Lecturer, RISE</td>
<td><a href="mailto:tufail.abbasi@riphah.edu.pk">tufail.abbasi@riphah.edu.pk</a></td>
</tr>
<tr>
<td>3.</td>
<td>Ms. Nourin Farooq</td>
<td>Senior Lecturer, FC</td>
<td><a href="mailto:naurin.zamir@riphah.edu.pk">naurin.zamir@riphah.edu.pk</a></td>
</tr>
</tbody>
</table>
4. Ms. Najla Raza Senior Lecturer, FC najla.raza@riphah.edu.pk
5. Ms. Maria Sultan Teaching Fellow, RISE maira.sultan@riphah.edu.pk
6. Mr. Fawad Sadiq Manager QEC, QEC fawad.sadiq@riphah.edu.pk

4. DEPARTMENTAL E-LEANING SUBCOMMITTEE

<table>
<thead>
<tr>
<th>Region</th>
<th>Faculty</th>
<th>Members</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Islamabad FMS</td>
<td></td>
<td>Dr Mubashar Zia</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad FMS</td>
<td></td>
<td>Mr. Aamer Sharif</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad FEAS</td>
<td></td>
<td>Mr Muhammad Shafique</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad FEAS</td>
<td></td>
<td>Dr Sohail Khalid</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad FEAS</td>
<td></td>
<td>Dr Asad Zaigham</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad FEAS</td>
<td></td>
<td>Dr Farooq Nasir</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad QEC</td>
<td></td>
<td>Mr Fawad Sadiq</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIPS</td>
<td></td>
<td>Dr. Shaq uz Zaman</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad RIPS</td>
<td></td>
<td>Dr. Alam Zab</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIPS</td>
<td></td>
<td>Mr. Muhammad Shajeel</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RCRS</td>
<td></td>
<td>Dr Ayesha Kamal</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad RCRS</td>
<td></td>
<td>Dr Huma Riaz</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RCRS</td>
<td></td>
<td>Dr Affan Iqbal</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIPP</td>
<td></td>
<td>Mr. Kashif Zaheer</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad RIPP</td>
<td></td>
<td>Ms Sana Naseem</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad NCUK</td>
<td></td>
<td>Ms Sameera Asif</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad NCUK</td>
<td></td>
<td>Mr M Ilyas</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIMS</td>
<td></td>
<td>Dr Moazzam</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad RIMS</td>
<td></td>
<td>Mr Muhammad Riaz</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIMS</td>
<td></td>
<td>Mr Noman Ansari</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad RIMS</td>
<td></td>
<td>Mr Hafiz Umer</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad IIMC</td>
<td></td>
<td>Prof Dr Rehan Ahmed Khan</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad IIMC</td>
<td></td>
<td>Dr Shahzad Akhtar Aziz</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad IIMC</td>
<td></td>
<td>Mr Kamran Akbar</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad Psy</td>
<td></td>
<td>Ms Amna Hassan</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad Psy</td>
<td></td>
<td>Ms Maria Tanvir</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad Psy</td>
<td></td>
<td>Ms Ayesha Mustafa</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad IIDC</td>
<td></td>
<td>Prof Alia Ahmed</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad IIDC</td>
<td></td>
<td>Dr Fasial Shafiq</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad IIDC</td>
<td></td>
<td>Mr Sohail Khalid</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad FC Female</td>
<td></td>
<td>Dr Shireen Tahira</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad FC Female</td>
<td></td>
<td>Miss Najla Raza</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad FC Female</td>
<td></td>
<td>Miss Naurine farooq Khan</td>
<td>Member</td>
</tr>
<tr>
<td>City</td>
<td>Organization</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>-----------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Islamabad</td>
<td>FC Male</td>
<td>Mr. Abdul Mateen</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad</td>
<td>FC Male</td>
<td>Mr. Syed Murtaza Pasha</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad</td>
<td>FC Male</td>
<td>Mr. Syed Hasnain Bukhari</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad</td>
<td>FC Male</td>
<td>Mr. Zeeshan Sabir</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RSBM</td>
<td>Ms Asma Tariq</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RSBM</td>
<td>Mr Samad Manan</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RSBM</td>
<td>Mr Ahsen Ahmed</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RIPS</td>
<td>Dr Ferhan Sohail</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RIPS</td>
<td>Dr Fareeha Anwar</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RIPS</td>
<td>Dr Badarqatul Ayesha</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCST</td>
<td>Dr Tauseef Zahid</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCST</td>
<td>Mr Ishfaq Ahmad</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCST</td>
<td>Mr Hamza Shahid</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RILL</td>
<td>Dr Muhammad Islan</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RILL</td>
<td>Hafiz Nauman Ahmed</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RILL</td>
<td>Miss Talat Jabeen</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICAS</td>
<td>Mr Imran Ahmad</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICAS</td>
<td>Ms Aumme Hani</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICAS</td>
<td>Ms Kanza Zafar</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCRS</td>
<td>Ms Saira Khalid</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCRS</td>
<td>Ms Tehreem Mukhata</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCRS</td>
<td>Ms Nameka Shahid</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RCRS</td>
<td>Ms Safia Firdous</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICPP</td>
<td>Ms Sana Majeed</td>
<td>Chair</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICPP</td>
<td>Ms Farheen Jamil</td>
<td>Member</td>
</tr>
<tr>
<td>Lahore</td>
<td>RICPP</td>
<td>Mr Muhammad Asad Javed</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad</td>
<td>RISE</td>
<td>Dr. Adeel Zafar</td>
<td>Chair</td>
</tr>
<tr>
<td>Islamabad</td>
<td>RISE</td>
<td>Mr. Tuffail Abbasi</td>
<td>Member</td>
</tr>
<tr>
<td>Islamabad</td>
<td>RISE</td>
<td>Mr. Syed Muhammad Sajjad</td>
<td>Member</td>
</tr>
</tbody>
</table>
## Appendix B – Moellim Log Template

### Moellim Automated Matrix

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td></td>
</tr>
<tr>
<td>Institute</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td></td>
</tr>
<tr>
<td>Semester</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td></td>
</tr>
<tr>
<td>Teacher Name</td>
<td></td>
</tr>
<tr>
<td>Student Enrollment</td>
<td></td>
</tr>
<tr>
<td>Unique Student Sessions in Last 7 Days</td>
<td></td>
</tr>
<tr>
<td>Enrolled Students Count which did not login (even once)</td>
<td></td>
</tr>
<tr>
<td>Resource Count in the Course</td>
<td></td>
</tr>
<tr>
<td>Student’s Accumulative Time Spent in the Course</td>
<td></td>
</tr>
<tr>
<td>Total Submission of Assignments</td>
<td></td>
</tr>
<tr>
<td>Count of Students Who Submitted Assignments</td>
<td></td>
</tr>
<tr>
<td>Total Submissions of Quizzes/Exams</td>
<td></td>
</tr>
<tr>
<td>Count of Students Who Submitted Quizzes/Exams</td>
<td></td>
</tr>
</tbody>
</table>
References and Bibliography

References and bibliography will be updated in the next version of the document.