KATHMANDU UNIVERSITY

ONLINE TEACHING LEARNING GUIDELINES

Prepared by

The Committee for

Kathmandu University Electronic Learning Forum

2020

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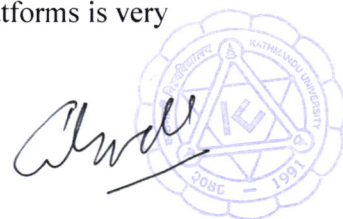|		
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TABLE OF CONTENTS

The **Preamble**

The coronavirus disease 2019 (COVID-19), an infectious disease caused by severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2), was first identified in December 2019 in Wuhan, China. It spread across the world leading the World Health Organization to declare it a pandemic on 11 March 2020. As WHO confirmed human to human transmission of COVID-19 and given the high rate of international movement that happens on a daily basis from and to all countries, Nepal has not remained unaffected by the pandemic. The Government of Nepal on Chaitra 11, 2076 (27 March 2020) announced nationwide lockdown to contain the spread and protect its citizens.

The lockdown has affected all spheres of Nepali life including the education sector where all students, faculties and staff have had to stay at home. Kathmandu University [KU] on-campus classes were also closed, and examinations could not take place. Immediately assessing the emerging emergency situation KU decided to run classes using available online educational platforms.

Initially, some of the Schools of the University were able to run most of their classes online effectively with Learning Management Systems (LMS) as they were also practicing online pedagogy before the COVID-19 situation. Some other faculties in other Schools have started running live classes using Skype, Google Meet, Zoom, etc.

This response to the crisis showed that the University appeared to have already developed a minimum basic infrastructure for online classes but did not seem fully prepared for the crisis. Except some faculties in certain Schools, faculties were not trained and accustomed to online mode of teaching as the usual required mode of teaching is face-to-face. Moreover, the hardware and connectivity required for hosting online learning software platforms is very weak at the faculties' end.

In this context, KU is now determined to develop a complete plan to prepare its faculties, staff, and students capable in technical aspects as well as be willing to adopt and practice new technology with adequate and robust infrastructure in all its academia. In addition to the technological provisions, the University needs to plan and adopt/implement a new pedagogical approach that fits the online teaching and learning. The courses, their delivery, modes of interactions and assessments are to be adjusted to suit the online mode. In addition, given the recent developments in Information and Communication Technology (ICT), the online system of learning is now more user-friendly, effective, trustworthy, interactive, and creative in many ways.

Appraising the far-reaching effect of the pandemic on the university education, Kathmandu University Executive Council, as per the decision of the 120th meeting of the Academic Council of the University, formed a Committee for the Kathmandu University Electronic Learning Forum (KUELF) to develop policy and procedural guidelines with specific terms of references.

As soon as the Committee was formed it started collecting information using various tools and techniques. The Committee held altogether seven full-body meetings and discussed the tasks, updated the information collected and made further plans. The members interacted with over fifty faculty members and technical staff on specific policies and practices, and status of the facilities. In order to collect the opinions of the wider faculties, a questionnaire was created in Google Forms and the link was emailed to all the faculties and fifty-four responses were received. The Committee also reviewed available documents, and the reports prepared on similar issues by School of Engineering and School of Education just before the Committee was formed. The Committee developed the guidelines presented in the following section.
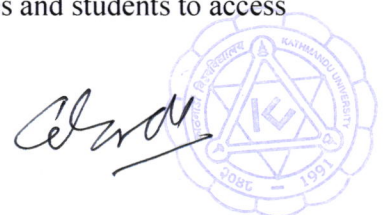
Guidelines for Online Teaching Learning

Part 1: Guidelines for Immediate Action (By the end of July 2020)

1. **Technological Platforms and Tools**

   a. All Schools of Kathmandu University start the online pedagogy on synchronous and asynchronous learning/teaching platforms. For this purpose, the Schools install/sign up/upgrade the platforms and tools such as Moodle, Google Classroom, Google Meet, Zoom, BigBlueButton and Microsoft Teams as a measure to start online teaching learning activities.

   b. The Schools use Moodle or Google Classroom as asynchronous platforms linking any kinds of synchronous video conferencing tools with recording facility comfortable to their students and teachers. (See Annex for recommended synchronous and asynchronous tools.)

   c. For course communication, faculties may use Email, Social media group, or any other comfortable means of communication including telephone calls.

2. **Faculty Training and Learning Resources**

   a. The Schools in coordination with the Departments conduct quick familiarization training for faculties on initiating online teaching learning activities. They facilitate the faculties to use both asynchronous platforms and synchronous tools. The quick training would also focus on developing and adapting digital materials such as word processing, spreadsheets, presentations, PDFs, graphics, URL and audio/video. For the use of LMS, faculties develop course materials in digital formats based on the existing curriculum in practice. Faculties can also compile them from different sources keeping the copyrights provisions in view.

   b. As the online pedagogical process progresses, the Schools further organise faculty training on online course development and teaching online or using the Learning Management System (LMS) namely Moodle and Google Classroom, and synchronous tools such as Google Meet and Zoom as per the needs of the faculties. Inter-School collaboration is expected to run such training sessions.

   c. Faculties send the list of suggested readings and other easily available materials for self-study to the students in addition to the digital materials shared/made available online.

   d. Central IT Unit prepares a "How to Use Moodle" for faculties and students to access and view as self-learning guide.

3. **Course Delivery and Monitoring**

   a. The University carries out a survey on the status of the students and their preparedness of using online learning facilities used by the University and shares the outcomes to the Schools.

   b. The Heads of Departments and Coordinators ensure the timely and effective communication with the concerned faculties on successful course delivery and engagement with the students.

   c. Faculties follow both synchronous and/or asynchronous modes of learning facilitation. However, for the lockdown period, lessons are delivered using available synchronous live sessions while making use of asynchronous Learning Management System (LMS) as available.

   d. Live sessions are recorded, the recordings are stored in the Google Drive or in a local server and the links are sent to students for access.

   e. Where the asynchronous LMS is well functioning, students are encouraged to attend the live sessions and engage in the asynchronous learning activities set by the faculties.

   f. In case of live only sessions, faculties set tasks and receive submissions via emails or any other comfortable means of communication for faculties and students.

   g. If the faculty deliver the sessions only on live sessions, students must attend minimum 50% of sessions. In case of the connectivity or accessibility issues, the faculties can help students compensate the absence with help of extra reading and viewing tasks.

   h. Adapting to online mode of pedagogy does not require revision in the existing curriculum. So, there is no need for the Subject Committees and Faculty Boards to make any formal decision on the existing courses.

4. **Formative Assessment**

   a. To assess the learning of the students, faculties set assignments, discussion forums, quizzes, glossary, wiki, workshops (a peer-review activity in Moodle), open book tests, and presentation of activities and viva voce using synchronous and asynchronous platform and tools.

   b. Faculties set time limitations for all types of assessments including open book exams. Depending upon the nature of the course, the Schools can make specific arrangements of formative assessments in coordination with the Departments.

5. **Summative Assessment**

   a. For the LMS based assessment, faculties set time bound quizzes, open and creative essay questions, virtual presentation by students, and viva voce.

   b. The Heads of Departments facilitate for summative assessment schedules so the appointments of the students with different faculties do not clash.

   c. Where live only sessions are organised for lesson delivery, faculties set open-ended, open book, take home assignments that require original answers, receive the answers via email, and organise online viva voce. Depending upon the nature of the course, the Schools can make specific arrangements for summative assessments in coordination with the Departments.
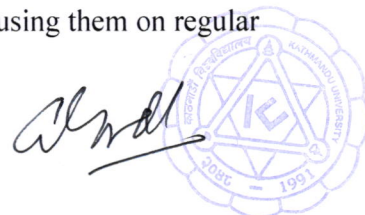
6. **The Compartmental Examinations**

   a. Regarding the pending compartmental examinations, faculties send time bound writing tasks and students submit the answers via email or LMS as available followed by online viva voce. In doing so, the Schools coordinate with Examination section for record keeping and reconciliation in the previous results data.

   b. In case of the practical based assessments, the Schools defer them to the next semester. However, for the final semester of the programs, Schools make provisions to organise them in whatever way it is feasible maintaining the physical distance and other precautions. In doing so, they consider the decisions of professional bodies such as the Nepal Medical Council, Nepal Engineering Council, Nepal Pharmacy Council, and Nepal Bar Council to ensure the validity.

7. **Proposal Defence and Thesis/dissertation Viva Voce**

   a. The research proposal defence and viva voce of the dissertations and theses are organized online in the lockdown period.

   b. After the lockdown is lifted, the Schools can decide to choose between online or face-to-face as per the convenience making it a usual practice of the University.

8. **Faculty Self-Assessment Report and Students' Feedback on Faculties**

   a. The University will circulate a faculty self-assessment form and a form for collecting students' feedback on faculties to the Schools. The existing standard forms are recommended. The Schools will use them as they are or customise them to suit to the nature of the programs and courses and use them to collect faculties' self-assessment pertaining their pedagogical planning and delivery and students' feedback on the faculties' pedagogical practices. The Schools will continue using them on regular

basis when the teaching learning on campus is possible. The forms will be customised to suit to the mode of pedagogy in use: online, face-to-face and blended modes.

9. **Institutional Arrangements**

   a. IT Team Formation

      i. The University forms an IT Team led by a Faculty as a coordinator at the central Unit. This team works for development and continuous upgradation of the e-learning system and training on its use. It hosts LMS server for each School with appropriate hardware, software, connectivity and power backup and closely coordinates and collaborates among them with the Schools as sharing of technological resources required for online teaching and learning across the university is necessary. The unit acts as a catalyst for deployment and customization of LMS as per the need of each School.

      ii. Each School forms a core ICT/e-learning team led by a faculty as a coordinator for continuous research, training and development of e-learning pedagogy/andragogy at the School. The team coordinates with central unit team for system deployment and development including faculty training and research on e-learning at Schools. The team includes a student representative as a member.

   a. Support provision

      i. Each faculty and relevant staff are given appropriate coverage for Internet connectivity for the lockdown period. After the lockdown is lifted, the School adjust this provision as per the need.

      ii. Each School sends name lists to NTC or any other data providers for subsidized rates and ensures they receive the services.

      iii. In-charge of Central Library in coordination with librarians at the Schools makes a list of open source databases and digital libraries, online journals subscribed by KU and the Schools that were available via on campus access and coordinate with ISMS/central unit to make them available to all KU students and faculty with off-campus access creating virtual private network (VPN).

      iv. The In-charge immediately starts the process for the E-book purchase and make the e-books available for all KU students and faculties for short-term loaning with expiry date condition. This task needs to be completed immediately. The Schools coordinate to collect list of such books from respective faculties.
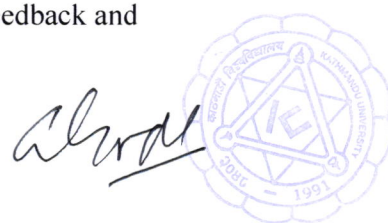
v. As these purchases require international payment cards, the University immediately makes necessary arrangement for such instant payment and notifies the Schools.

b. Exam and Account Sections

i. Examination section facilitates online exams where applicable. It also facilitates in changing the modality of the Compartmental examination and deferring it to the next semester where applicable.

ii. Account section at central office makes arrangements of e-payments so that students can pay their fees using popular mobile wallets or any other online payment Gateways or online transfer from their bank accounts (bank to bank transfer). School account sections inform students about their payment status using SMS or telephone call. The Schools decide to waive the late fees, if any, for the period of lockdown.

c. Originality Checking and Plagiarism Prevention Software

i. To ensure the originality of the assignments submitted, the University buys multiuser licenses of an originality checking and plagiarism detection software such as Turnitin (www.turnitin.com) for each School immediately. The Schools organise an orientation for faculties on using the software.

d. New Admission

ii. The Schools prepare for new admission by developing their online capacity to announce new admissions online. In doing so, ISMS supports Schools to develop:

- Online forms to collect admission applications.
- Online entrance tests: written and interview
- Online entrance results publishing
- Online admission and registration of successful candidates

Part 2: Guidelines for Short-term Action (by the Start of Fall Semester 2020)
Strengthening Technological Infrastructure

a. The Schools adopt Moodle platform as the asynchronous mode of teaching/learning with a preference of using BigBlueButton for synchronous mode of student and teacher interactions. Faculties use the Moodle platform for the whole pedagogical cycle – lesson planning, content delivery, student engagement in various form of activities, activity log tracking, evaluation, record keeping, feedback and communication.

b. The University sets up at the Central Unit a dedicated server for each of its Schools and provides full administrative control with cPanel accounts to each School. The server would be a powerful one with minimum 2TB HD, 32GB RAM, Intel Core i9-9900KS equivalent processor. As the server has to run without any interruption, appropriate power backup system (a combination of live, solar, generator) for 24/7 uptime guarantee will also be installed. The central IT team is responsible for the process.

c. Connectivity to each server would be strong enough to host LMS and media server with dedicated fibre line and powerful back-up connection. Bandwidth requirements are based on number of students and connection traffic to the server. The Internet connection should be subscribed with.

d. The central IT team and the ICT/e-learning teams of the School closely coordinate in the process.

Faculty training
   a. Schools and Departments plan and conduct trainings for the faculties to develop online modules of the respective courses to be taught in the Fall Semester.
   b. The training focuses on the course modularization as a preparation for the using Moodle as an asynchronous LMS. The technical staff at each School support the faculties in preparation of the online module courses and help them establish in the School's Moodle platform. The Heads of Departments facilitate the faculties to continue using and exploring digital teaching materials. At this point faculties learn to develop online module of the course they teach in the fall Semester.
   c. The Heads of Departments and Coordinators continue to ensure the timely and effective communication with the concerned faculties on successful course delivery and engagement with the students.

Support
   a. The University ensures that each faculty has necessary devices such as laptops for learning facilitation.

b. The Central library develops a full-fledged e-library and e-book repository with the systems for short term loaning of e-books to all KU students and faculties.

Part 3: Guidelines for Long-term Action (By 2021 January)
Strengthening Technological Infrastructure

a. Each School ensures that the upgraded interface and platform is up and running and the Moodle platform provisions are in place. For this, the Schools upgrade and maintain the technical set-up made in the short-term action plan implementation.

b. The technical team at the Central Unit works for development and deployment for customized use of LMS and supports Schools' e-learning teams for e-content development.

c. It also works for installation of development computers and recording studio at each School for recorded lectures and e-contents with graphic design, audio/video editing, and animation and simulation requirements.

Course Planning, Delivery and Monitoring

a. Schools adopt a blended mode of pedagogy using synchronous and asynchronous platforms and face-to-face delivery. Each faculty prepares and implements blended approach to learning facilitation. In this blended mode, the faculties use the LMS for uploading semester plan, course materials, reading and viewing materials. They also set assignments and other tasks and students submit their responses there. The LMS is also used largely for assessments. The face-to-face meetings are for lectures and practical tasks. It is up to the faculty and also the nature of the course to decide the ratio in using either mode. The Heads of Departments facilitate in the process.

b. Each faculty uploads course plans on the LMS at the beginning of each semester. Concerned Heads of Department periodically monitor course plan uploading, resource sharing and other activities of each faculty and participation of the enrolled students on the LMS.

c. Upon admission of students in any program, all of them are given uniform email IDs such as example_student@ku.edu.np, or example_student@kusoed.edu.np etc. Similarly all the faculties including visiting faculty also have the similar email IDs. These IDs are created by the IT Sections at Schools.

d. After course registration by the students in each semester, concerned HOD sends information with the list of registered students and assigned faculty of the courses to

9

IT section of the School. The IT sections enrol the registered students and assigned faculty in the LMS before the semester starts.

e. The concerned faculty submits course completion reports to the HOD who forward an overall course completion report to the Dean for necessary records and settlements.

Faculty Training and Development

a. Each School mandates the faculties to get trained to use Moodle with availability of the training course. It also plans and organizes intensive training to modularize all courses, develop and adapt the digital teaching learning resources.

b. In the future recruitments, the University prioritizes the candidates who are familiar with online pedagogy and the Schools organise training for those candidates who enter without the skills immediately after their entry. They also organise refresher trainings when new tools and technology come into use.

Institutional Arrangements

a. Support for Library and Learning Resources

    i. The Central Library continues to explore digital / online resources and makes arrangements to make them available to the all Schools.

    ii. The University makes an arrangement of issuing education license of MS Office 365 package to all its students and faculties.

b. Admission, Exam and Account Sections

    i. The University integrates admission form processing system and registration system in electronic forms across the University replacing paper submissions.

    ii. The Exam section digitizes all its process and ensures that all the services are swift and efficient.

    iii. An integrated digitized system of School administration, exam and account is developed and established at each School.

c. Equity, Inclusion and Safety

    iv. The University and Schools do not outsource any online services and platforms unless the data protection is guaranteed. Local servers are much safer than third party platforms. So, gradually, the University develops its own IT infrastructure.

    v. The Schools run orientation for faculties and students on the ethical use of the ICT tools.

    vi. In order to maintain quality of the teaching learning, all students mandatorily own a laptop. In case some students cannot afford, they are given grant support

by the University. For this, the University either uses its own resources or seeks funds from external sources.

vii.   As online education has become mandatory, the students – online, face-to-face and blended modes – are treated in the same way and their certificates and transcripts do not specify which mode they attended the University classes. Their documents bear the degrees they earned.

Part 4: General Code of Conduct

1. Faculties and students comply with etiquette and punctuality during teaching and learning process.
2. They respect each other displaying appropriate behaviour by using respectful words, positive and considerate tone of voice and body language when they are speaking and working with each other.
3. They create a friendly environment and maintain courtesy that allows the teachers to teach, and all students to learn.
4. They are accountable for their acts and activities.
5. They avoid distractions, being unkind and using sarcasm, harassment or bullying in any form including via social media of any student and faculties.
6. Aiding and insisting of such activities also amount the breach of code of conduct.
7. Faculties and students shall strictly observe right to privacy and intellectual property law. They should not do any acts that breach the electronic transaction law.
8. Plagiarism is strictly prohibited.
9. Everyone should obtain informed consent from the original source before publishing any materials in any media or such platform.
10. The concerned Schools shall administer the Code of Conduct for students. They identify the specific students who is in a breach of Codes of Conduct. The corrective decision of the School administrator is final.
11. The Code of Conduct not listed above may be subject to the authority of the Deans of respective Schools.

Part 5: Financial Implications

The activities listed above have financial implications on the following technological and other items. The University and the Schools make arrangements for items related to their scope.

1. **Equipment installation**
   a. Hardware Installation
   b. Server
   c. Hybrid power backup
   d. Cooling system
   e. Server rack
   f. Hub, switches
   g. Firewall

2. **System set-up, development and maintenance**
   a. Software installation
   b. Customization and development
   c. Moodle deployment
   d. Library software and installation

3. **Licenses and memberships**
   a. Multiuser license for plagiarism checker
   b. Education license of Office 365
   c. eBooks and online journals

4. **Infrastructure and Connectivity**
   a. Internet with 100 Mbps up/down bandwidth including backup connection
   b. IT section setup
   c. Development computers and peripherals
   d. Furniture

5. **Faculty support**
   a. Coverage for data connectivity for the lockdown period
   b. Faculty training and development

6. **Recurring costs**
   a. Maintenance costs: Power backups; hardware, software maintenance and connectivity
   b. Faculty/staff follow-up training, development and research

Note: Please consult Annex II for the suggested budget planner format which along with other Annexes is separately available at the Office of the Registrar.