**UCSF School of Medicine**

**Technology Enhanced Education (TEE)**

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This resource is created to help guide faculty and staff as we move the curriculum to emergency remote learning. Due to limited time and resources, we won't be able to do everything we'd like. Creating meaningful remote learning experiences takes more time and thoughtful planning than we currently have. With that in mind, here's a framework for rapidly implementing emergency remote learning.

**Goals:**

* To guide all staff and course support in remote learning
* To guide all faculty, instructors, and TAs in remote learning for the Bridges Curriculum during the COVID19 crisis
* To highlight available resources at UCSF for remote learning including Ilios, Moodle, Zoom, MS Teams
* To share a set of best practices and how-to guides for teaching remotely
* To guide and train the staff and faculty in Remote Learning

**Key Topics:**

1. Plan your curriculum for remote learning
2. Manage the curriculum sessions and delivery
3. Communicate with students
4. Use strategies for remote teaching
5. Leverage Student Technology Leads (STEEL)
6. Assess outcomes
7. Facilitate faculty and staff development:
	1. Guides for using Zoom to teach
	2. Live training and practice supported by TEE
8. Getting student feedback

**1. Plan your curriculum for remote learning**

* Use the learning objectives to guide the selection and design of learning experiences
* List of vetted technology to use:
	+ Ilios
	+ Moodle
	+ Zoom
	+ Box
	+ Poll Everywhere
	+ Qualtrics
* Ilios is our main curriculum management platform
	+ All objectives will continue to go in Ilios
	+ This is what the students use for sessions, calendars, links to Zoom sessions
* Decide what activities can be **asynchronous** and **synchronous**
	+ Consider using existing resources first, then consider the creation of new instructional resources
		- Keep in mind, many of the UCSF technology resources are at full capacity, it may be more challenging creating new resources now
	+ What teaching strategy(s) best achieves the learning objectives given existing resources?
* **Alternative teaching strategies for remote learning:**
	+ Use this table below to find alternative teaching strategies used at UCSF and supported strategies and technologies:
		- Alternative teaching strategies: <https://meded.ucsf.edu/sites/meded.ucsf.edu/files/Alternative_Teaching_Strategies_Remote_Learning.docx>
	+ Consult with TEE on what can be asynchronous or synchronous and the technologies to support those learning experiences

**2. Manage the curriculum sessions and delivery**

* Continue to use Ilios for the calendar and curriculum management
* Use the sessions in the Ilios calendar for any info about remote learning content
* Add Zoom links (and all Zoom phone numbers) in the Ilios sessions for location
	+ Make sure the Zoom sessions are set up to follow the security guidelines

**3. Communicate with students**

* Continue to use student forums in the CLE
* Use email or Slack for internal team communications
	+ If you already use Slack, consider inviting TEE to join and communicate in your channel
* For the future, TEE is exploring Microsoft 365 to provide better communication for teams, instructors, students and admins

**4. Use strategies for remote teaching**

* Teaching strategies using Zoom
	+ Use breakout rooms - think/pair/share
	+ Use a framing Q in chat before lecture starts
	+ Polling
	+ Ask students to share a question or topic they want more info on in Chat
	+ Annotation and whiteboard use
	+ It's important to call on students and to ask questions during Zoom sessions
	+ Share videos
* **Large groups/lectures**
	+ Zoom guides and best practices for live sessions. TEE trains course facilitators.
		1. Faculty Guide for Conducting Live Lectures using ZOOM
		2. Zoom Guide for Presenting Yourself on Video (in progress)
		3. Zoom Guide for Humanizing Remote Meetings (in progress)
	+ Alternative strategies: <https://meded.ucsf.edu/sites/meded.ucsf.edu/files/Alternative_Teaching_Strategies_Remote_Learning.docx>
	+ Other resources
		1. Enhance existing LectureCasts with quizzing (added questions, scoring)
		2. Pre-record an asynchronous lecture using Zoom: See Faculty Guide for Pre-recording a Lecture in Zoom.
* **Small groups**
	1. Set up live small groups using Zoom for up to 12-15 simultaneous small groups. TEE and the coordinators can support these before and during sessions.
	2. Zoom Guide for Facilitating a Small Group
		1. Use one Zoom meeting URL per each small group (e.g., 12 small groups require 12 Zoom meeting URLs)
			1. One leader per small group
			2. TEE will provide support and guidance in setting these up
				1. We recommend scheduling a 1-hour tech practice training session with TEE on breakout rooms before implementing it
				2. Note that it's possible to use Zoom's breakout room feature by pre-assigning students, but we don't recommend this as it doesn't work well at this time
	3. Incorporate well-tested teaching strategies for small groups by Drs. Denise Connor and Sandrijn van Schaik (link coming)
	4. Alternative strategies: <https://meded.ucsf.edu/sites/meded.ucsf.edu/files/Alternative_Teaching_Strategies_Remote_Learning.docx>
* Use **polling tools** to further engage students, especially for large groups. TEE can support these before and during sessions.
	1. Use Poll Everywhere in a Zoom session as an added layer of interactivity
		1. Poll Everywhere is anonymous
		2. Ask students questions
			1. Check in, use a framing question (e.g., word clouds, open-ended, etc.)
			2. Ask content questions (e.g., multiple choice, "pin" areas of anatomy, and much more)
		3. Faculty can reveal answers while sharing their screen either as answers come in and after a pause
	2. Use Zoom's built-in polls for some multiple choice questions and participant engagement

**5. Leverage Student Technology Stewards**

* These are volunteer students that TEE trains to help with small groups
* They provide support for small group leaders to get started using Zoom
* Coordinate with TEE

**6. Assess outcomes**

* Use Moodle:
	+ Remote exams
	+ Checkpoints and remote exams (same set up as before, delivered remotely)
* Use Qualtrics to assess knowledge before and after sessions
* Use enhanced LectureCasts (prior lecture recordings with added quizzing) to assess lecture content
* Communicate clear expectations for student assessment in small groups
* Use Poll Everywhere and Zoom polling for formative assessment during a session

**7. Facilitate faculty, student and staff development**

* TEE offers short consultations for new approaches for delivering content
* TEE collaborates with courses to assess effectiveness of sessions
* TEE offers hands-on training, event support and workshops
* TEE provides self-guided resources:
	+ Complete list of Zoom Guides: <https://meded.ucsf.edu/ZOOM>
	+ Essential Zoom guides for **participants** (e.g., any remote person who is not the host):
		1. Zoom Guide for Participants - Basic
		2. Advanced Zoom Participant Guide for Mac users
		3. Advanced Zoom Participant Guide for PC users
		4. Zoom Guide for Presenting Yourself on Video (in progress)
	+ Essential **foundational Zoom guide for facilitators** (e.g., faculty presenters, course directors, course coordinators acting as host or co-host):
		1. Basic Zoom Guide for Facilitators
		2. Zoom Guide for Humanizing Remote Meetings (in progress)
	+ Essential **advanced Zoom guides for facilitators**:
		1. Advanced Zoom Facilitator Guide for Mac Users
		2. Advanced Zoom Facilitator Guide for PC Users
		3. Faculty Guide for Conducting Live Lectures using Zoom
		4. Pre-Session Checklist for Conducting Live Lectures Using Zoom
		5. Zoom Guide for Facilitating a Small Group
		6. Zoom Guide for Facilitating Breakout Rooms
		7. Zoom Guide for Facilitating a Live Panel (in progress)
		8. Faculty Guide for Pre-Recording a Lecture in Zoom
		9. Zoom Guide for Managing Recordings for the Bridges Curriculum
		10. Zoom Guide for Student Tech Stewards (in progress)
		11. Zoom Guide for Using Poll Everywhere with Zoom

**8. Getting student feedback**

* As we roll out new strategies for remote learning, it is important to get student feedback on what's working and not working
* Many of these strategies are new and evolving; we are learning a lot as we develop these solutions
* TEE will share this student feedback with the course leadership, ACE and TEE
* Consider coordinating on and sharing systematic methods for feedback (survey, focus groups, and others)

**Resources**

[Alternative Teaching Strategies for Remote Learning](https://meded.ucsf.edu/sites/meded.ucsf.edu/files/Alternative_Teaching_Strategies_Remote_Learning.docx)

[UCSF School of Medicine Remote Learning Toolkit](https://meded.ucsf.edu/remote_learning)

[UCSF School of Medicine Zoom Guides](https://meded.ucsf.edu/ZOOM)

The difference between emergency remote teaching and online learning. Authors:

[Charles Hodges](https://members.educause.edu/charles-hodges), [Stephanie Moore](https://members.educause.edu/stephanie-moore-2), [Barb Lockee](https://members.educause.edu/barbara-b-lockee), [Torrey Trust](https://members.educause.edu/torrey-trust) and [Aaron Bond](https://members.educause.edu/mark-aaron-bond). Published: Friday, March 27, 2020

<https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

**Questions?**

SOM Technology Enhanced Education (TEE) group. Email for more information: iROCKET@ucsf.edu