

## Educational Technologies for Teaching Remotely

### Synchronous vs. Asynchronous Teaching

- Synchronous Teaching: instructors and students are online at the same time, and teaching occurs in real time.
- Asynchronous Teaching: instructors and students are online at different times and teaching occurs without real time interactions with students.
- Successful teaching combines both synchronous and asynchronous teaching methods.

### Educational Technologies Available to USNA Faculty

Synchronous Teaching Tools	Asynchronous Teaching Tools
<ul style="list-style-type: none"> <li>• Google Hangouts Meet – Web Conferencing System</li> <li>• Google Jamboard – Digital Whiteboard</li> <li>• Zoom – Web Conferencing System</li> </ul>	<ul style="list-style-type: none"> <li>• Blackboard – Classroom Management System</li> <li>• Google Classroom – Classroom Management System</li> <li>• Panopto – Lecture Capture System</li> <li>• Respondus LockDown Browser and Respondus Monitor – Antiplagiarism Software</li> </ul>

### Panopto

- Panopto is a lecture capture system that allows instructors to create, manage, and distribute searchable multimedia.
- Use Panopto to:
  - Record and distribute lectures and flipped classroom videos outside of class
  - Live broadcast a lecture during class time (Note that there is a delay when live broadcasting, so it’s better to use it as an asynchronous teaching tool for student review at a later time)
  - Record and distribute lab demonstrations, training programs, simulations, etc.
  - See viewing statistics
  - Embed quizzes in videos

### Google Hangouts Meet & Zoom

- Google Hangouts Meet and Zoom are Web conferencing systems that supports audio, video, text and screen sharing and recording.
- Use Google Hangouts Meet or Zoom to:
  - Conduct live classes
  - Meet with students online (for EI sessions, etc.)
  - Meet with colleagues online
- Google Hangouts Meet vs. Zoom

	Google Hangouts Meet	Zoom
License	G-Suite Enterprise license Allows unlimited meetings with up to 250 participants.	Free basic plan with unlimited meetings for up to 100 participants (40-minute time limit on meetings with three or more participants). 100 Zoom for Education licenses which allows meetings with unlimited minutes for up to 300 participants.
Integration with Google Calendar	Yes	Yes. Integration with Google Calendar can be done by installing the <a href="#"><u>Zoom Scheduler Chrome Extension</u></a>
Support Video/Audio	Yes	Yes
Screen Sharing	Yes	Yes
Share Computer Audio	Yes (Only through presenting a Chrome tab)	Yes
Grid View	Yes (Native tiled layout displays up to 16 participants. Google plans to expand the tiled layout to display up to 49 participants. Users can use a <a href="#"><u>Grid View extension</u></a> to view all meeting participants. )	Yes (Gallery View displays up to 49 participants in a single screen. View up to 1000 participants thumbnails. )
Mute Participant Audio	Yes	Yes
Remove participants	Yes	Yes
Group Messaging	Yes	Yes
Breakout Rooms	Yes ( create separate Google Meet rooms. Users can use a <a href="#"><u>Breakout room Extension</u></a> to automatically create breakout rooms for Google Meet	Yes
Live Streaming	Yes (Up to 10,000 viewers)	Yes
Recording	Yes	Yes
Waiting Room	No	Yes
Set Meeting Password	No	Yes
Lock Meeting	No	Yes

Mute Participants Upon Entry	No	Yes
Mute All/Unmute All	No	Yes
Turn off Participant Video	No	Yes
Control Who Can Screen Share	No	Yes
Simultaneous Screen Sharing	No (Only one person at a time)	Yes
Mobile Sharing	No (Users can use a mobile device to join a Google Meet in order to share)	Yes
Whiteboard Sharing	No	Yes
Annotation Tool	No	Yes
Private message	No	Yes
In-Meeting File Transfer	No	Yes
Polls	No	Yes

### Blackboard & Google Classroom

- Blackboard and Google Classroom are course management systems
- Use Blackboard or Google Classroom to:
  - Post course documents
  - Communicate with students
  - Collect assignments
  - Have online discussions
  - Give online quizzes
  - Manage course grades
- Blackboard vs. Google Classroom

	<b>Blackboard</b>	<b>Google Classroom</b>
License	Campus-wide license	Enterprise license for G-Suite which includes Google Classroom
Post course documents	Yes	Yes
Attach multiple file attachments	Yes	Yes
Content Adaptive Release	Yes (Date, Grade & Membership Rules)	Yes (Date & Membership rules only)
Create assignments drop boxes with due dates	Yes	Yes
Assignment Inline Grading	Yes	Yes
Anti-plagiarism Tool	Yes (Safe Assign)	Yes (Originality Report)
Batch Download Assignment Drop box Submissions	Yes	Yes (through Class Google Drive Folder)
Allow Assignment Submission through App	Yes	Yes
Create tests and surveys	Yes	Yes
Different questions types	Yes (17 Different Types)	Yes (9 Different Types)
Threaded Discussions	Yes	Yes
Grade Center	Yes	Yes
Course Copy	Yes	Yes
Integration with G Suite	Limited <ul style="list-style-type: none"> <li>• Can attach files located in Google Drive</li> <li>• Push Calendar events to Google Calendar</li> </ul>	Yes <ul style="list-style-type: none"> <li>• Full Integration with other G-Suite products.</li> <li>• Class Google Meet, Google Calendar and Google Drive folder</li> </ul>
Integration with MIDS for Enrollment data	Yes	No
Integration with Panopto	Yes	No (Create links to the Panopto Videos)
Wikis, Blogs & Journals	Yes	No
Students can run originality check before submitting assignments	No	Yes

Student can Unsubmit Assignment	No	Yes
Test Pools	Yes	No
Add Test Questions from Another Tests or Pools	Yes	No
Upload Test Questions	Yes	No
Integration with Respondus LockDown Browser and Respondus Monitor	Yes	No
Create Groups	Yes	No
Include Grades for Non-Assignment Items	Yes	No