

#### **STEP INTO STEM**

### 1. Materials

Internet access, one-to-one computer use daily, and access to the LSU servers.

Reusable Hardware/Material	Recommended Unit	Cost/Unit
Various reusable material and hardware for projects	1 per classroom	\$1,500
Consumables		
Various consumables for projects	1 per classroom	\$500

<sup>\*</sup>Complete supply list can be found here.

# 2. Required software, networking access, and access to LSU servers

- Students will need to sign up with online development and testing environments, including but not limited to codesandbox.io, jsfiddle.net, scratch.mit.edu and others.
- Students will need access to YouTube instructional videos relevant to the course, as well as other educational video repositories.
- Teachers will need to be able to access the LSU servers using several Internet protocols including but not limited to HTTPS and SSH.
- Students and teachers will access the curriculum and teaching materials through the LSU and BRBytes servers, and through Google Drive.
- o Teachers will need to share student data with their designated LSU Pathway Point-of-Contact.
- Principals will need to communicate with the district's information technology department to ensure that there are no technological restrictions that block access to the LSU servers in the Isu.edu, brbytes.org or Isupathways.org domains on any port.In addition to the sites mentioned above, students will need web access to:

https://nutrientsforl	https://nutrientsforlife.or	Unity	<u>Learn.Genetics (utah.edu)</u>
ife.org/product/hu	g/product/humanity-agai		
manity-against-hung	nst-hunger/		
er/			
Edulastic.com	Python editor	audacity	https://manual.audacityteam
			.org/quick_help.html
Micro Bits software	https://bio.libretexts.org/	https://www.bbc.com/news/heal	https://manual.audacityteam
	Bookshelves	th-23358290	.org/
Youtube	https://todayshomeowne	https://www.theweathernetwork	https://forum.audacityteam.
	r.com/debate-over-organi	.com/news/articles/five-awful-w	org/
	c-chemical-fertilizers/	ays-extreme-heat-affects-the-hu	
		man-body/51464	
Google Drive	Zoom or other video	https://pbs.twimg.com/media/B	Making Documentary Videos:
	conferencing platform	61aGsYlgAAPdSo.jpg	The Interview - Videomaker
instructables.com	https://www.lakeshorehe	https://pbs.twimg.com/media/D	https://www.mayoclinic.org
	althpartners.com/Uploads	yHUp2jXcAlopBB.jpg	
	/Public/Images/Blogs/UR		
	GENT%20CARE%20infogra		



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https://hallowlane.c om/the-complete-di y-motors-for-hallow een-props-guide/	https://www.cdc.gov	https://ehs.princeton.edu	https://sciencing.com
Makecode	https://www.coolantarctic a.com/Antarctica%20fact %20file/science/cold-wea ther-sport.php	WEVideo or other video editing platform	https://designschool.canva.c om/courses/canva-101/?less on=opening-canva-for-the-fir st-time
Canva for education Canva.com	https://blog.nols.edu/201 5/12/18/4-ways-you-can- get-cold-and-how-not-to	https://lpb.pbslearningmedia.org /resource/lsps07-sci-phys-therm alenergy/thermal-energy-transfe r/	https://www.osha.gov/SLTC/ heatstress/controls.html

# 3. Required teacher collaborations

Teachers will communicate with LSU instructors via emails, apps hosted on the LSU servers, and the band.us app.

4. Required administration of course content, pre/post test, and research instruments
All required materials and instruments will be either posted in the LSU servers or their location announced via email with the teacher/instructor group for this course.

## 5. Course Work

Teachers must present the course material in sequence or as approved by collaboration with the LSU Pathway Point-of-Contact. In the fall semester, teachers will report post-test results for each unit to the Point-of-Contact. In the spring semester, the teacher is responsible for utilizing the LSU servers based system to release, acknowledge, provide student feedback, and grade student work. The LSU servers will track and notify the teacher as students near the required 75% attainment mark for certification.

### 6. Other

As this is a project-based learning class, we strongly suggest that each section of the course be limited to a *maximum* of 25 students. The course is dependent on the teacher providing feedback and reviewing student code. The course requires that teachers have adequate time to interact with each student.