The STEM Guitar Project

Supported through National Science Foundation (# 1700531 #1304405)

Design.

Build.

Play.

Learn.

STEM Guitar

guitarbuilding.org

The National Science Foundation supported STEM Guitar Project has provided 12 years of innovative professional development to over 850 faculty instructing from middle school to college; Our efforts focus at high school and community college levels. This project has impacted over 10,000 of students and faculty over the years.

Our goal is to make learning an immersive opportunity bringing the Hands on tactile learning in line with the theory. We have developed extensive curriculum for both online, remote and face to face learning which includes fabricating a guitar through any delivery medium.

Getting started with STEM guitar:

Sign up for a institute or workshop. Participants (faculty and veteran) will build his/her own custom electric guitar and engage in student centered learning activities that relate the guitar design to specific math, science and engineering topics that are linked to national / state standards.

Veteran's please reach out to our veterans liaison (below)

STEM Guitar Summit Summer 2021

SDSU - San Diego, CA

Learn, Share, Involve

Come share your ideas, successes and challenges, learn about how to incorporate STEM guitar into your classroom.

Special opportunities and funding support for presenters. Encouraging middle school through college presentations

Call for Presentations opens Winter 2021

www.Guitarbuilding.org/summit



STEM Guitar Institutes Details for Teachers

- Typical workshop sessions include the following: STEM Learning Activities in the following disciplines: Physical Sciences, Math, Engineering, and applied Technology topics (CAD/CAM, manufacturing, Reverse Engineering etc.)
- Next gen and common core tagged projects
- Online evaluation tools for your classroom
- \$\$\$ Stipend for attending
- Custom headstock designs
- Fretting and setup and intonation of instrument
- Guitar Electronics installation (Electric / CNC)
- Neck Installation and setup
- Project implementation discussions
- Rock Star Friday!

Summer 2021 Planned Institutes

- Offering of a combined Electric guitar and CNC Institute: Learn how to make guitar bodies and necks and applied STEM curriculum along with building an electric guitar
- An Acoustic guitar institute for past participants
- Our institutes have a flipped classroom through video and webinar instruction. We provide Online instructional media through

2020-2021 Veterans project

- Providing training in CNC technologies and CAD design (remote and F2F)
- Holding face to face workshops @ Sinclair and Temecula, CA
- To get involved or gain further information on the veterans project reach out to: tony@phoenixpatriotfoundation.org







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