

Greater Cincinnati STEM Collaborative (GCSC) Applications for Summer of STEM 2019 Camps

Release Date: December 20, 2018

Greater Cincinnati STEM Collaborative (GCSC) helps prepare students for their futures and to join Greater Cincinnati's workforce through connected, robust STEM learning pathways. STEM learning is propelled by business, education, community collaboration and our culture of incubation, acceleration, and inclusion.

Our vision is that Greater Cincinnati continues its growth as a technologically rich, vibrant community with the most talented STEM workforce in the country that is representative of the region's population. GCSC prioritizes organizations serving students underrepresented in STEM (low-income students, girls, and students of color – African American, Latino/Hispanic, mixed race) for direct funding and support.

All Summer of STEM 2019 camp applications must be submitted by Monday, February 4, 2019.

Summer of STEM 2019

Summer of STEM combats summer learning loss ("summer slide") by creating opportunities for students to explore STEM learning and careers specifically during the summer months. GCSC funding mainly supports students who otherwise would not have access to high-quality STEM programs. Visit the Summer of STEM webpage to review previous summers' results, partners / supporters, and more.

Due to the generosity of our region's STEM education and workforce development supporters GCSC is pleased to offer "camps-in-a-box" again Summer of STEM 2019. Camps are designed by expert educators and based on previous successful programs:

- 1. **3d Printers Club Camp** Students will learn with a hot, exciting technology. The <u>3d Printers Club</u> builds students problem-solving skills, technical skills, and confidence. The club offers two curricula: Problem Solving Inventions (<u>link to overview</u>) and 3d Grand Prix (<u>link to overview</u>).
- 2. **Computer Science Camp** Students will think algorithmically, computationally, creatively, and critically while collaborating and communicating with others. They will learn about Computer Science and have the opportunity to explore their interest in the ever-changing and rapidly growing Information Technology (IT) field. Link to overview
- 3. **Garden Engineers**—Students will engage a series of mini-experiments to assist in their development of an algorithm to produce a successful and sustainable garden. Camps encourage students to decompose the act of building a sustainable garden. Link to Overview
- 4. **Introduction to STEM: Design and Making Camp** Students will choose a technology-related passion project designed to grow their critical thinking, creativity, and collaboration skills while increasing their interest in STEM. They will present what they learn to an authentic audience. Link to overview
- 5. **STEM Bicycle Club Camp** Students will experience GCSC's <u>STEM Bicycle Club</u> in the summer camp environment by breaking down and re-assembling bicycles they get to keep. The club builds student making skills, problem-solving skills, and confidence. *NOTE: Camps will only be awarded to partners that have previously hosted a STEM Bicycle Club.* <u>Link to overview</u>
- 6. Other (write-in) GCSC will award several mini-grants, up to \$3,000 each, to support programs designed to engage students in new, innovative STEM programs that will be prototyped in summer 2019. Preference will be given to K-12 teachers that participated in the 2018-2019 STEM / STEAM Lab Teachers Professional Learning Community.

Timeline

Milestone	Date
Application window opens	December 21, 2018
Applications due	February 4, 2019
Recipients announced	February 25, 2019
Camps Professional Development	May 8, 2018 (4:00pm-8:00pm) – University of Cincinnati
Summer of STEM Community Debrief	August 9, 2018 (11:00am – 1:00pm) – University of Cincinnati

Submitting Your Application

Use this link to submit your application

Once you're on the application site:

- 1. Make an account or sign in.
- 2. Begin filling out your information.
- 3. If you want to save a draft, scroll to the bottom of the application and click the "Save Draft" button. Access draft by logging into submittable.com, clicking the drop-down menu on the top right by your name, clicking "My Submissions," selecting "Saved Drafts" from the top bar, then clicking "Continue."
- 4. When your application is complete, click the orange Submit button. You will receive an email confirming your application has been received.

NOTE: Partners may submit multiple applications for Summer of STEM 2019 Camps.

Camp Selection Principles

- 1. **Inclusion and Access:** GCSC will award clubs disproportionately to educators (and their partners) serving students who are underrepresented in STEM (low-income students, girls, and students of color African American, Latino/Hispanic, mixed race). GCSC will award clubs broadly across the region, while meeting other principles.
- 2. **Readiness & Commitment:** Club leaders and their sponsors must be committed to collaborate with GCSC and community volunteers to:
 - Maximize and measure positive student impacts
 - Share the story of club and student success
- 3. STEM engagement best practices: Camp leaders will successfully employ STEM Engagement Best Practices.
- 4. **Sustainability:** GCSC prioritizes funding applicants who:
 - Co-invest to cover at least a small portion of their camp costs. GCSC will help with partners' fundraising as wanted (coaching / consultation, provide information needed for grant writing, and /or letters of endorsement, etc.).
 - Will re-apply, and maximize the subsequent use of, resources and knowledge gained in Summer of STEM during the 2019-2020 school year.
- 5. **Innovation:** Up to 12% of GCSC's Summer of STEM 2019 funds will be allocated to support new, innovative approaches to using <u>STEM Engagement Best Practices</u> for students during the summer months. Preference will be given to K-12 teachers that participated in the 2018-2019 STEM / STEAM Lab Teachers Professional Learning Community.
- 6. **Sponsor Priority:** Funding will be awarded in line with sponsors' priorities: geographic location / diversity, student age and / or diversity, etc.

Camp Resources Provided By GCSC

- 1. Curriculum that includes coaches guide with lesson plans and student workbooks.
- 2. Tools and thought starters to support volunteer engagement, student recruitment, family engagement, and more.
- 3. Professional Development (PD) / training and consultation for camp leaders.
- 4. Camp materials, purchase and delivery coordinated by GCSC.
- 5. As needed a small budget for camp food and staff stipend.

NOTES

a. GCSC is not able to fund desktops, laptops, Chromebooks, mobile devices, or robotics equipment referenced in camp overviews. Applicants should ensure access to this equipment as part of submitting camp applications.

b. Applicants applying for mini-grant funds via the "Other (write-in)" category will have access to resources described in #2 above. Applicants will provide all other resources, including with the funds provided by GCSC.

Camp Roles and Responsibilities

1. **Project Manager:** Plans the camp, including logistics and resources. Is the primary communication interface between the school, parents, community partners, volunteers, and GCSC. Key partner with the teacher to plan space and food, recruit students and obtain family permissions, administer post-club surveys, arrange transportation to culmination event. Collaborates with others to recruit volunteer coaches / mentors. Ensures organization agrees to and accepts GCSC camp grant terms. Serves as liaison between teacher and technical (IT) support to ensure all required technology is operational. With camp teacher plans involvement of students' families.

GCSC has seen many types of people successfully provide project manager leadership, including: resource coordinators, school counselors, after-school / 21st Century coordinators, instructional coaches, other teachers, administrators, community partners, and volunteers.

2. **Teacher:** Prepares and leads camp meetings, using provided curricular resources. Creates tie-ins to science and math curriculum taught during the school year. With camp project manager plans involvement of students' families. Ideally, is a K-12 math, science, engineering, or other STEM / STEAM teacher.

High-Level Camp Action Plan

- 1. Decide camp meeting location / work space.
- 2. Recruit volunteer coaches (mentors) from the partner organizations identified & confirmed during the application process.
- 3. Notify technical (IT) personnel of needed connections.
- 4. Attend all-region camp training / professional development at UC.
- 5. Plan how and where camp materials will be stored between camp meetings.
- 6. Plan method to recruit students.
- Plan Food
- 8. Select students. Collect permission forms and media releases.
- 9. Plan parent / family involvement. 9. Plan for club visitors, including media.
- 10. Run camp, including:
 - Administer online surveys regarding camp impact and benefits
 - Regularly post camp pictures on social media
- 11. Attend all-region project debrief at UC.
- 12. Stay tuned for information about the all-region end of summer / back to school festival for students, families, volunteers, and other camp partners

"Thought Starter" Planning Resources

Attracting Volunteers
Family Involvement

Questions?

Contact GCSC at gcscstemed@gmail.com if more information is needed to complete an application. Inquiries should include a description of the information needed and full contact information (name, organization, email address, and phone number).