



SPACE  
GAMBIT



## Asteroid Grand Challenge Project Proposal



### **Project Summary:**

In partnership with SpaceGAMBIT, Curiosity Hacked proposes to develop a new program in collaboration with NASA's Asteroid Grand Challenge. CH would develop a new mastery badge for Asteroids that would compliment and be included in our comprehensive Space Exploration and Technology Badge as well as construct an online tool for communication and the sharing of information, creating a network of young citizen scientists.

One of the most successful pieces of our work with SpaceGAMBIT over the past months has been the dissection of how we approach badges and why we structure them to cater so intimately to individual goals and needs. We would also like to produce a badge theory document that would explain this process in a thorough, accessible way so that other may benefit from our experience.

SpaceGAMBIT's mission of "building grassroots collaborative activities that encourage related education and project development" is perfectly aligned with the scope of our proposal. Our badge curriculum will introduce and build knowledge and skills around an immediate need to

understand, track, and crowdsource the possibilities of asteroid study and usefulness. It will also create a social movement, utilizing a community forum which connects our citizen scientists with each other and the mentors we recruit from NASA. Together, we can initiate interest and activity in an exciting and accurate way through learner centered programming.

**Primary Contact:**

Samantha Cook  
CH Executive Director

**Project Description:**

Asteroid Grand Challenge Part 1:

Asteroid Badge

The Curiosity Hacked Asteroid Badge would compliment our established Space Badge Program as an additional component of space exploration and technology. It would include activities that assist learners in the understanding of asteroid composition and behavior, the identification and tracking of asteroids, and the possibilities around asteroid avoidance, travel/colonization, and mining.

Asteroid Grand Challenge Part 2:

Online Asteroid Community

One of the most essential components of promoting citizen science is providing a way to disseminate and share information. By building an online open source community, specific to this topic, learners would be able to contribute real, relevant information, which not only validates the assistance our community can give the AGC but also creates the social movement necessary to forming attachment, loyalty, and passion around the subject and for NASA.

## Asteroid Grand Challenge Part 3:

### Badge Theory Document

One of the most successful pieces of our work with SpaceGAMBIT over the past months has been the dissection of how we approach badges and why we structure them to cater so intimately to individual goals and needs. The AGC is a perfect example of how standards can be created within the context of each learner's passions and interests. Using AGC as a case study, we would like to produce a theory document to explain this process in a thorough, accessible way that can be reproduced. We would also like to produce this document in a packet for libraries, museums, maker/hacker spaces, and other organizations to use as a foundation for integrating our methodology into their programs.

### **Budget:**

AGC	Includes	Allowance	Total
Part 1: Badge	Curriculum Development and Prototype, Materials	4000	
Part 2: Community	Build online community forum and maintenance, hosting fees, outreach (advertising and promotion)	5000	
Part 3: Theory Document	Write document for open source disbursement. Produce online and hard copy packets for libraries, etc., including outreach.	6500	15500

**Deliverables:**

Online open source badge program  
online community forum connected to the AGC badge  
theory packet, available online and in hard copy  
accounting spreadsheet detailing costs  
progress and final reports on project details

**Timeframe:**

This project will be completed by August 30th, 2014. All materials will be available online, the community forum will be established and accessible. This project will remain online and maintained, updated, and evolved as new research becomes available indefinitely.