

# Physics Unlimited Volunteer Position Descriptions

## *Categories*

<b>Leadership</b> Lead a major initiative (Premier, Explorer, or Moonshot program)	<b>Creative Design</b> Help design original content, physics problems, or social media.	<b>General volunteer roles</b> Help connect volunteers and students, run competitions, grade problems, and more.
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Please fill out [this very brief form](#) to express your interest in any of the volunteer roles listed below.

**This fall, the annual Premier Competition is taking place on Sunday, November 6, 2022.**

**The following six roles are therefore the most time-sensitive and urgent to fill.**

*Last update: September 2022*

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## ~ PREMIER COMPETITION ~

*Timeline: September – October*

### **Premier administrator** (*1 slot*)

Act as the public-facing (for competitors) point of contact for the annual [Premier Competition](#)'s agenda in coordination with the Board. Maintain process flow of team (consisting of Zoom hosts for online iterations, problem creators, graders, and award distributor), pass all submissions and grading rubric to graders, enforce deadlines. Be the deciding voice on score distribution, jointly with Board.

### **Premier problem czar** (*1 slot*)

Be the lead of problem creators' team; compile all official problems and solutions/rubric (in LaTeX), share these files with Premier administrator on time

### **Premier problem creator** (*up to 5 slots*)

Be a member of a team creating the problems and grading rubric, under the guidance of Premier problem czar

### **Premier Zoom co-host** (*3-5 slots*)

Be one of the Zoom hosts of the Premier Competition, in accordance with an already-prepared script

### **Premier grader** (*no limit of slots*)

Grade handwritten solutions to problems submitted by competitors via email soon after the virtual iteration, adhering to the rubric provided. Aim to grade the portion set by Premier administrator within two weeks.

### **Premier award distributor** (*1 slot*)

Distribute PDF versions of award certificates based on the score distribution set by Premier administrator

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~ **MOONSHOT PROGRAM** ~

*Anytime*

**Moonshot program coordinators** *(3 slots)*

- **for high schools** *(1 slot)*

Be the point of contact for finding and maintaining a list of schools whose students would benefit from adapted iterations of a [Moonshot curriculum](#), pass along new findings to the Board through a spreadsheet

- **for prisons and pre-release programs** *(1 slot)*

Be in charge of reaching out to prisons and programs where incarcerated learners may benefit from adapted iterations of a Moonshot curriculum, maintain a spreadsheet shared with the Board with updated status

- **for students and individual learners** *(1 slot)*

Communicate with interested individual learners about the Moonshot curriculum, maintain a list of registrants in a spreadsheet shared with the Board

**Moonshot curriculum designer** *(up to 6 slots)*

Be a member of a team designing, adapting, and updating the Moonshot curriculum for each of the three types of beneficiaries above, under the guidance of the corresponding Moonshot program coordinator

**Moonshot pedagogy researcher** *(up to 3 slots)*

Research various teaching methodologies used across districts, schools, and/or settings with incarcerated individuals, and communicate the findings to Moonshot program coordinators and curriculum designers

**Moonshot curriculum teacher** *(no limit of slots)*

Teach a version of the Moonshot curriculum (designed earlier) to one of the target audiences in your local geographic area (or area of interest), under the guidance of a Moonshot program coordinator

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~ **PROJECT CAMP** ~

**Project Camp coordinator** *(1 slot)*

Lead a team of volunteers to design a creative assignment for physics learners to tackle; enforce deadlines

**Project Camp designer** *(up to 10 slots)*

Be a member of a team designing a creative assignment for students to help them learn the subject collaboratively. The assignment should be suitable for those going through the Moonshot curriculum, be at a substantially lower level than the Explorer Competition (below), and heavily involve an applied component.

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~ **EXPLORER COMPETITION** ~

*Timeline: January - March*

**Explorer administrator (1 slot)**

Act as the public-facing (for competitors) point of contact for the annual [Explorer Competition](#)'s agenda in coordination with Board; maintain process flow of team, consisting of assignment creator(s) & judges/graders, post assignment and announce start/end of competition online, collect all emailed submissions and share in bulk with assignment lead, enforce deadlines. Be the deciding voice on score distribution, jointly with Board.

**Explorer assignment lead (1 slot)**

Be the lead of the assignment creators' and judges' teams; compile all exercises and solutions (in LaTeX), share these files with Explorer administrator on time. Be in charge of all submissions and graded works.

**Explorer assignment creator (up to 5 slots)**

Be a member of a team creating the assignment for the annual Explorer Competition, under the guidance of the Explorer assignment lead. You would get to collectively choose a theme and create exploratory exercises.

**Explorer assignment judge (no limit of slots)**

Be a member of a team judging the competitors' submissions (in PDF files), under the guidance of the Explorer assignment lead. As a team, aim to complete judging and commenting on all works within four weeks.

**Explorer award distributor (1 slot)**

Distribute PDF versions of award certificates based on the score distribution set by Explorer administrator

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~ **OUR NEW PODCAST** ~

*Anytime*

**Podcast coordinator (1-2 slots)**

In charge of coordinating tasks and moving along the process of creating episodes for this **very new** Physics Unlimited podcast, where student competitors and organizers/volunteers of our past events will be invited for a brief (virtual) conversation as guests to talk about their current professional life, research, academic path, etc.

**Podcast interviewer (unlimited slots)**

Practice your *people skills* by interviewing past participants and/or organizers for an episode or more. It is your choice, and you may volunteer for as many episodes as you wish.

## **Podcast designer / editor (1-2 slots)**

In charge of putting together and editing the recorded episodes of the Physics Unlimited podcast introduced above. If you have some creative talent or simply a keen interest in aesthetics (visual or audial), please consider this volunteer role!

## **Podcast liaison and publisher (1-2 slots)**

Connect with podcast guests to thank them for participating and reach out to prospective guests. Distribute completed episodes of the Physics Unlimited podcast introduced above to the dedicated website and/or on social media and email lists.

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### **~ MISCELLANEOUS ROLES ~**

## **Regional site (US) logistician (1 slot)**

Maintain an updated spreadsheet of all volunteers' current higher educational institutions (including the number of volunteers from each), classifying each as a regional site. Pass requests to create new site pages on the Physics Unlimited website to the Board.

## **Volunteer coordinator (1 slot)**

Seek undergraduate and graduate-level volunteers for the design and operation of Physics Unlimited cyclical programs periodically in coordination with the Board; reply to their emails as needed

## **Relief Grants committee (up to 10 members)**

Be a member of a committee (chaired by one of the Board members) to select teachers for relief grants, as done for the first time in the summer of 2020 when six \$500 grants [were distributed](#) to teachers in need. The resources for those grants were provided by individual committee members as personal one-time donations; future rounds would need to involve fundraising and/or crowdfunding.

## **E-mail manager (1 slot)**

Reply to incoming emails from prospective student participants, parents, or teachers within 48 hours of receipt with information pertinent to their corresponding requests or questions. Skip emails addressing the Board with higher-level partnership requests or questions. Alert the Board to any urgent emails received.

### **Social media architect** *(1 slot)*

Administer Physics Unlimited's social media accounts (Facebook, Instagram, Twitter) and work to brainstorm and implement different content ideas (including the use of photos and results from past events) to boost engagement. No experience necessary, but must be willing to learn, be creative, and experiment.

### **Funding researcher** *(3 slots)*

Research entities who may be willing to support our non-profit's mission and future programs monetarily and maintain records in a spreadsheet shared with the Board. If applicable, communicate with representatives of these organizations and set up meetings as appropriate. Be willing to take initiative! This role is most suitable for those either with experience interacting with potential donors and/or those who wish to acquire such experience for future opportunities.