

# The Summer Laureate



*Wisdom lies not in knowledge - which quickly becomes outdated - but in perpetually seeking it.*

*~ Socrates*

**2018**

**University of Dayton**

**Kennedy Union**

## Laureate Mechanics

- Only a limited number of students can be accepted into and accommodated in the Summer Laureate
- The Laureate will be held from 8:30 am to 3:00 pm daily.
- Students who are selected for Laureate will be sent further details. On opening day, an orientation meeting with class schedules will be held on campus for parents and students.
- All Laureate participants and their parents automatically grant permission for use of student activities, such as picture taking, movies, video or audio taping. Permission is also granted for planned field trips. It will be necessary to have medical forms on file and your own medical insurance.
- Transportation to and from the campus will be provided by the parent.
- Lunch and snacks will be served in the Kennedy Union. A non-refundable application fee is necessary. (If student is not accepted, application fee will be refunded.) The remaining balance of \$200 must be paid by
- Make checks payable to:  
**Lelia C. Boyd, Ph.D.**  
**Director - Summer Laureate**  
**538 Hopper Hill Farms Road**  
**Cincinnati, Ohio 45255**
- Fees are non-refundable for cancellations after **June 1**.
- The deadline for nominations is **April 20**.
- After deadline, please call for possible openings, (513) 753-9143.
- Notification of applicants who are selected is **May 4, 2018**. Phone: (513) 753-9143.

**Lelia C. Boyd, Ph.D.**  
**538 Hopper Hill Farms Road**  
**Cincinnati, Ohio 45255**

PLEASE USE THIS FORM FOR EACH NOMINATION

(PLEASE PRINT LEGIBLY.)

Student Name \_\_\_\_\_ DOB \_\_\_\_\_ Grade Level **September 2018**

Name of School \_\_\_\_\_ School System \_\_\_\_\_

Parent(s) Name \_\_\_\_\_ Phone# \_\_\_\_\_

Home Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Enrolled in a gifted/talented program? Yes \_\_\_\_\_ No \_\_\_\_\_ Achievement Test Scores \_\_\_\_\_

Latest group or individual intelligence test: \_\_\_\_\_

Name of Test \_\_\_\_\_ Date Given \_\_\_\_\_ Score (s) \_\_\_\_\_

\*Signature of Nominator \_\_\_\_\_ Position/Title \_\_\_\_\_

Check your favorite subjects in school (number your choices in order of preference) \_\_\_\_\_ Science \_\_\_\_\_ Math \_\_\_\_\_

Reading \_\_\_\_\_ Music \_\_\_\_\_ Art \_\_\_\_\_ Other, What? \_\_\_\_\_

Have you attended previous Summer Laureate Sessions? Yes \_\_\_\_\_ No \_\_\_\_\_ If so, when? \_\_\_\_\_

PLEASE NOTE: Returning Laureates do not need to re-submit eligibility documents/test data. Email \_\_\_\_\_ Total Fee \_\_\_\_\_

Application Fee \_\_\_\_\_ OFFICE USE ONLY

**Sudsy Cells**

Needless to say, this is a hands-on activity! Groups culture cells from unwashed hands, add regular bar soap, regular liquid soap, anti-bacterial soap, dishwasher soap, and hand sanitizer to the cultures. Grow for an assigned time, decide which soap removed the most bacteria. Incubation petri dishes and analyze results. Biology, chemistry, and life science - all rolled into one workshop. Real learning and no splashing water!

**Yesterday's Trash = Tomorrow's Robot**

Think twice before discarding that 1985 CD-ROM, don't throw away that aluminum can, and find that plastic bottle under the couch!! State-of-the-art session, eco-friendly while stretching your imagination as well as taking part in the joy of recycling. These "Bots" are powered by sunlight. Hands on; solar topics (Lab Fee \$15)

**A Candy Dispenser**

What you always wanted, huh? Laureates will design and build a prototype candy dispenser with your team. Your team will have specific instructions with limitations which will assure a prototype that you want as a completed project. What an opportunity for great team work experience in completing this task. You and your team members can even give your dispenser a name.

**2017 Weather Reports**

What a year for hurricanes! Forecasting and tracking hurricanes have improved. Building designs still need much help. Generate ideas, develop and test solutions. An exciting session - start with low tower requirements then strengthen each tower testing the wind force (fan). Build, test, and redesign a building that can withstand a (simulated) hurricane. Creative engineering for you Laureates!

**Paper Penny Bridge**

Physical forces and engineering design process need the Laureates attention! We need a bridge; not much money to build it with - in fact, copper pennies is the best we could afford. You can build a bridge from a single sheet of paper and up to five paper clips. It must span 20 cm and support the weight of 100 pennies. Your budget is limited, but you can trade-off materials. Can you do it? Sure you can?

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# Summer Laureate 2018 • June 18 Through June 22

## At the University of Dayton Kennedy Union

### Laureate 2018 - A Perspective

#### Welcome Summer!

*Sail away from the safe harbor. Catch the trade winds with your sails. Explore. Dream. Discover. ~ Mark Twain*

#### The Summer Laureate -

#### A unique summer program...

- ...where high academic achievers in grades three through eight have the opportunity to expand their knowledge within a university setting.
- ...where dedication to the pursuit of learning are reflected in the staff, students and program offerings.
- ...where there exists a challenging education plan that blends academic, cultural, social and recreational components into a rich and natural environment
- ...where a staff is selected for their high level of preparation in their disciplines, outstanding teaching abilities and enthusiasm for working with bright students.

### To Our Students

Midday activities bring the “Laureate Family” together for guest speakers, discussion topics and cultural presentations.

The cost for the one-week program is \$300. This includes all activities, instructional materials (except assigned lab fees), recreation, noon meal and snacks, plus the Sundae Social on Friday afternoon. Details will be given at orientation on **June 18**.

### Selection

Laureate is designed specifically for high academic achievers who meet the following criteria:

- Enrolled in a gifted/talented program in their respective school.
- OR
- Superior achievement in an academic program
  - Student entering third through eighth grade in **September 2018**

Final selection is dependent upon the Laureate screening after all data is considered. Those who are selected will be notified by **May 4, 2018**.

### You're Invited!

Back by popular demand! The Sundae Special is a Laureate tradition since its inception. Time and location to be announced. A happy event to a fun-filled week. Invite your family members to join us!

### Workshop Descriptions

Choose SIX of the workshop sessions which interest you. Number your choices in order of preference (1, 2, 3, etc.) in the boxes provided by each workshop you select. There is a maximum capacity attendance for each workshop so be sure to register as soon as possible. We will make every effort to provide three workshops of your choice. A workshop may be cancelled if there is insufficient enrollment.

*Because young minds matter*

## Grades 3-5

- Potato Power**  
The lovable potato can light an LED clock (or light bulb)!! Learn how a battery works in a simple circuit, and how chemical energy changes to electrical energy. Amazing! Along with this, learning of voltage, current, and resistance. Connect 2 potatoes! Can we get electrical energy from a fruit or vegetable? (I never saw a potato I did not like even Mr. Potato Head!) Wow! What a session!
- Seismic Shake-up!**  
The earth does rumble! As an engineer, you will build your own structure to withstand damage. Build out of toothpicks and marshmallows. Test how earthquake-proof your building by simulating an earthquake in a pan of Jell-O. Test it, and then redesign the structure based on its performance. A very scientific process! Since your project was so good, make a pitch to a company to convince them to let you design a better building or structure for them. So challenging and an appropriate problem solving session!
- Humanoid - What's that?**  
Well, it's a robot with its body shape built to resemble a human body. Your team's task is to program a "humanoid robot" to build a structure. A programming station will be set up for a team of two. Note: listen to the robot language: programmer, sensor, microcontroller. Trade roles; switch the programmer and robot roles so you will experience both a programmer and a robot. Learn the learning limitations of a robot. What a great session! Other topics too.
- Toothpick Bridges**  
How did the chicken cross the road? If it were smart, it built a bridge! That's what this session does!!! Integrate math, science and technology. One of the most popular engineering activities is the bridge design and construction. Strive to build a bridge to support as much as possible!
- A Laureate Car Dealer**  
Build rubber band racers and mint mobiles. SO EXCITING! Test the rubber band racers and the mint mobiles, evaluate the results, measure distance, calculate speed. Test and refine the designs. Explore options for other vehicles.
- Laureates Go West**  
Form a wagon train, pack your belongings, yoke up oxen, and head for Oregon Territory. Face the hardships of 1840 pioneers. Join us for a six month journey. History revealing. Places you in the real life of early pioneers.

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- Harmless Holder**  
Invent a holder for 6 cans that's animal-safe, sturdy, convenient and easy to carry. Protect our animal friends from discarded plastic rings. Build, test, and redesign. They will love you! Great Teamwork.
- Fairy Tales on Trials**  
Observe a fine line between “doing wrong” and “crime”. Character education, critical thinking, lots of problem solving, and teaches our actual legal system. Act as lawyers, judges, witnesses or defendants in court cases. Join us in this session! You will like it!! Who knows this session might just open a career field in your future!!
- Dayton Daily News**  
B.B. Wolf indicted - FINALLY! You know what he did! Public opinion found him guilty of destroying the residence of those little pigs. Demonstrates principles of American life. This criminal trial simulation may shed doubts on his previous conviction. Was he really guilty of destroying their house? Could he have been merely a victim of wolf prejudice and circumstantial evidence? We shall see! Let the court decide! A great learning experience with lots of interest and enthusiasm

## Grades 6-8

- Spaghetti Soap Box Derby**  
Want to race? Get ready to design, build and test model vehicles capable of rolling down and coasting - how far who knows? Your vehicle - made entirely of pasta for the chassis. Constraints, but you can do it!! A challenge—you bet! Learn gravitational, potential energy, kinetic energy, and rolling resistance. May the best partners be derby winners! (Other Topics)
- Touch Down**  
Protect an astronaut from being crushed by the forces of lift-off - How? You must help them! Design and build a shock-absorbing system for a spacecraft to protect two marshmallow astronauts when they land. After the marshmallow design, stakes will be altered by using an egg. Fun and EVEN more challenging - take command!
- Cupcakes: What's Their Impact?**  
Laureates will learn life-cycle assessments. How do engineers determine environmental impact of everyday products like the lowly cupcake? More than just yummy!! Six teams will calculate data of a cupcake's life cycle - wet and dry ingredients, baking materials, frosting, liner disposal. What an exciting and can't-get-any-sweeter workshop!

Continued on Next Page