The Women In Natural Sciences Program (WINS) is an after-school science enrichment program for high school girls of the Philadelphia School District, specifically public and charter schools. We put special emphasis on providing opportunity for those from single-parent or non-parent guardian households, or those facing financial limitations.

WINS is a year round program. To participate, students must be nominated during the 8th grade year and complete the application process. Those selected must enter the program at the completion of their 8th grade year. We begin in July, and continue throughout the school year.
Program Objectives: Science Enrichment

WINS II students receive a lesson on fossil snails from our Invertebrate Paleontology Team

WINS girls learn about the natural sciences through hands-on, inquiry based activities, field trips, and by meeting with Academy scientists and researchers.

WINS I students tour Mammalogy Specimen Collection with Ned Gilmore, Vertebrate Zoology Collections Manager
Program Objectives: College Preparation

WINS girls receive support from WINS Staff, Alumnae, and Drexel University Affiliates throughout the college selection and application process. We write recommendations, assist students with the Common Applications and FAFSA, and take WINS II (10th-12th grades) on an annual college tour.

WINS II College Tour to Western Pennsylvania. Top photo: Penn State; Bottom Photo: UPITT
Program Objectives: Career Exploration

WINS girls participate in internships and other career focused opportunities. Each summer, several girls travel to work with our researchers in the field.

Trinity Niroda collecting macroinvertebrates to study the water quality in Lake Lacawac, PA

Others have the opportunity to work with scientists in our specimen collections. The Academy of Natural Sciences is a natural history research institution, housing nearly 18 million specimens. Interns may help catalogue and digitize these collections.

Fionna Truong, Malacology Intern, showing her work to fellow WINS girls.
Program Objectives: Positive Youth Development

WINS prides itself on being more than just a science program. We value the need to provide a safe haven for young women to explore their interests free from judgement, and to help them grow into motivated, confident young women. All WINS are assigned a “Big Sister” to serve as a mentor and guide during their first year.

We provide opportunities for WINS girls to present at conferences, network with other youth throughout the Mid-Atlantic region, and to learn from mentors like our WINS Alumnae.
In 2019, WINS was awarded a grant from the National Science Foundation to incorporate programming and opportunities focused on Engineering. This grant will continue for the next two years, and will include the following:

- Curriculum modifications that allow students to learn the Engineering Design process while connecting it to the natural sciences
- Internship opportunities with Engineering mentors in academia and in the industry: To participate in these internships, students must complete WINS I and advance to WINS II. Internships take place the summer following their freshman year.
- Research study focusing on the impact of the opportunities provided by this grant: The research component will focus on how exposure to engineering impacts the students’ knowledge and appreciation for engineering. It will also evaluate the mentors’ experiences working with teens and their affinity to work with teens in the future. The purpose is to understand and dispel any misconceptions professionals have toward working with teens so that we can open more opportunities in Engineering Fields for those who may not have had access before.

WINS I participants Iyanna Henderson and Kiyah Talley presenting their blueprint for an improved phone camera mimicking hawk vision.
The WINS Application Process

Please be advised: Due to the COVID-19 outbreak and temporary closure of the Museum, we made some modifications to the 2020 Application Process.

The Nomination

All students must be nominated in order to apply. This was done by your teachers, counselors, parents or other family member.

The Application Booklet

By now you should have received an application booklet sent directly to your home. If you do not have the booklet, email the WINS Manager at kag379@drexel.edu, and I will email you a copy. Please note that the deadline for the completed application has been extended to April 30, 2020.

There are 4 components of the application:

- **Contact information and Household Details:** There are specific questions that ask about household and income. You may be qualified for a grant that is specific for high school girls in the Philadelphia School District. It is the Charles Ellis Trust for Girls. Please note you do not have to be Ellis Eligible to be selected for WINS, and you do not need to be in WINS to qualify for Ellis. If you are a single parent, or a non-parent guardian, you should know about this program! They help provide families funding for school supplies and uniforms, and help to pay for your daughter to participate in other programs. The Charles Ellis Trust was the original funder of the program, and has continued to help fund WINS since 1982. Please visit [https://ellistrust.org/](https://ellistrust.org/) for more information.

- **Essay Questions:** The student is expected to complete these questions. At the end, please note that both the student and the parent must sign to complete the application.

- **Recommendations:** The application requires one Teacher Recommendation and one Counselor Recommendation. A counselor can also be a coach, after-school activity leader, church official, etc. It cannot be a relative or a family-friend. We are looking for an adult who works with your daughter in an activity outside the home. Please note that due to the challenges presented with COVID-19 closures of schools and activities, we will accept the application with at least 1 of the 2 required recommendations.
The WINS Application Process

- **Grades:** Applications must include the grades for the entire 7th grade year and the most recent grades for the 8th grade year. It does not have to be a report card. Students are welcome to access their student portal and print grades from there. The application is not complete unless both sets of grades are included.

Once we receive all completed applications, we carefully review them and select 50 students to be interviewed. Those selected for interviews will receive a letter with a list of dates and times. Students/parents will be required to call and schedule a day and time for interview. From the 50 interviews, we choose 25 participants for the 2020 cohort.

All interviews usually take place at the Museum. However, due to the uncertainties of the foreseeable future, we may have to consider virtual or phone interviews. We will address the best way to move forward with interviews once we review the status of the Museum and the health and safety of you and your families next month.

Frequently Asked Questions

- **Is there any cost for students to participate in WINS?** It is completely FREE of charge for you to participate in WINS. We are a grant-funded program and have been working with generous donors for many years to help us pay for your participation.

- **Is transportation provided for participants?** We do not provide transportation to and from the museum. However, we do provide SEPTA Key passes for students to take the bus and/or train. We provide transportation for all field trips, but we always leave from the museum and dismiss from the museum upon our return.

- **If I attend a school that has a required summer program such as Parkway, can I participate in WINS?** Unfortunately, No. The summer session is mandatory, so any student that is unable to attend the summer will not be considered.

- **We planned a family vacation before learning about WINS. Will this impact my chances of being selected?** We know that people have plans in the summer. If a student is going to miss 1-2 weeks, we can still consider you for the program. However, missing any more time than that greatly reduces your chances of being selected.

- **Am I allowed to bring a sibling, parent, or friend to classes or trips?** No. We appreciate the support and interest others have in our program, but unless we have a special occasion when we invite a parent or family member, all activities and field trips are exclusive to WINS girls only.

WINS

Women In Natural Sciences

The Academy of Natural Sciences of Drexel University
It is important to reiterate that the WINS program is year round and that all participants are expected to commit to the full year.

Summer Session

- The summer session begins immediately following the completion of 8th grade. This is usually on July 1st or the week of that day. This year we do begin on July 1, 2020.

- We meet every Monday-Wednesday-Friday from 10:00 am to 3:00 pm unless there is a special circumstance. One field trip is far away, so we meet earlier and end later. For the 4th of July we may rearrange the schedule that week so students can enjoy the holiday. This information will be provided well in advance on the schedule.

- Each day, we break for lunch between 12:00-1:00 pm. Students are expected to provide their own lunch unless we specify otherwise.

- The summer session focuses on Science in the City. Essentially, we spend time learning about the science behind everyday necessities, the things we forget require science to work. Here are the topics of focus:
  - Week 1: Discovering your World; What is Science?
  - Week 2: Water (Field trips Water Works and Water Treatment Plant)
  - Week 3: Food (Field trips Community farm and Duffield’s Farm in NJ)
  - Week 4: Energy (Field trip Coal Mine; 7:30 am-6:00 pm)
  - Week 5: Waste (Field trips Pennsauken Landfill and COVANTA)
  - Week 6: Urban Parks (Field trips Rittenhouse Square and Wissahickon Park)
  - Week 7: 5 day Overnight trip to Poconos Environmental Education Center
  - Week 8: Wrap up summer session, prep for school, and go over fall schedule
**WINS: The Schedule**

**WINS I Schedule**

**The School Year**

- We meet every Wednesday from 4:00-5:30 after school. I assure you that students are capable of making it on time to the museum from most high schools in the city. If by any chance students are not able to leave school in time, we can provide a letter requesting the student be dismissed early to make it to WINS. However, it is up to the parent/student to give the letter to the school official. We rarely have issues with this concern.

- Approximately once a month, we have a field trip that occurs on a Saturday. This may vary slightly as it depends on balancing the WINS I and WINS II schedules. One trip in January occurs on Martin Luther King Day because the location is not open on weekends.

- During the school year, we focus on topics that directly reflect the research we do at the Academy of Natural Sciences. The units are as follows:
  - Fall: Biodiversity/Classification (Field trips to Hawk Mountain and Bronx Zoo)
  - Winter: Evolution/Adaptations (Field trips to AMNH and Wagner Museum)
  - Spring: Aquatic Environment (Field trips to Adventure Aquarium and Lady Maryland Living Classroom in Baltimore Harbor)

- During spring break (as scheduled with the Philadelphia School District), we have a second 2-3 day overnight trip to Delaware to explore ecology of the salt marsh. For those in Charter schools who may have spring break at a different time, we will provide excuse letters to miss school for this trip.

**Transition from WINS I to WINS II**

The last class for WINS I is around the second to last week in May. Before then, students will receive an application to move into WINS II. There is no interview required, but they must complete a series of essay questions and provide their grades. In order to move into WINS II, students will be scored on their grades, their attendance, their attitude, and participation. Those who move into WINS II will have opportunities to participate in internships, college tours, personal growth workshops, and potential (limited) employment as an Explainer in the Museum.
WINS: Routine

The WINS Routine

• The Academy of Natural Sciences is our home. All activities and trips begin here and end here. It is the participant’s responsibility to get to and from the museum. However, we do provide SEPTA Key Cards for those who need them.

• Lessons and workshops take place in one of the museum classrooms. While many of these lessons are led by the WINS Staff, we often have other educators, professionals, and scientists work with our students as well.

• During the summer, about 50% of our time is at the museum, the other 50% is spent on field trips. During the school year, about 75% of our gatherings are in the museum while the other 25% are field trips. A “field trip” counts as anything we do away from the museum. A couple of our “trips” are within walking distance.

• We provide participants and guardians with schedules in advance for each semester, as well as a list of any necessary items to bring when leaving the museum. In WINS, hiking and walking is one of the things we do the most. We hike A LOT, so be prepared!

What to Expect from Us

First and foremost, we work hard to hold ourselves accountable as well as the students. We do this by modeling the behavior we expect from them. For example, when we are in class, we do not play on our phone because students are not permitted to either.

We work hard to communicate efficiently with students and parents. There are no secrets, surprises, or catches when participating in WINS.

• Schedules: We always provide schedules in advance for the following semester. If anything changes, we do our best to make sure you know as soon as we know.

• Supplies: We provide all learning materials for class. For field trips, we have some extra supplies like water bottles, rain ponchos, wading boots, binoculars, etc. However, it is wise to invest in things like a pair of boots or shoes you don’t mind getting ruined, a water bottle, and a rain coat. Umbrellas are not effective when hiking in the forest!

• Necessities: We have emergency supply of things like feminine hygiene products, medicines, and first aid, but students should be sure to bring these when necessary.

• Overnights: We always provide a packing list of what students should bring and expectations for the trip. All lodging and meals are provided/paid for by WINS Staff. We promise students will never go without something they need of we can help it.
WINS: What we Expect from You

WINS Expectations

As mentioned, our goal is to provide opportunities for students to explore the sciences and opportunities for personal growth. With that comes expectations:

- WINS participants must maintain a “B” average in school. If students fall below this, they are not immediately dismissed, but they are required to show effort to bring up their grades, especially if there is a “D” or “F” in a class. We can help connect them with tutors, usually getting support from other WINS students who excel in specific subjects.

- Students MUST demonstrate respect for all other participants. We are a very diverse group of people from all walks of life, and while students are not required to be friends with everyone, we must show respect for one another.

- All WINS are representatives of the Academy and most importantly, themselves. We expect students carry themselves with poise and dignity.

- Attendance is MANDATORY! When one is chosen to be in WINS, you are expected to commit to the full schedule. Any student going below 75% attendance risks being dismissed from the program.

- If a student must miss class, she or her parent must contact us prior to class. If not, the absence will be marked as Unexcused. Two unexcused absences will result in dismissal from the program.

- Students are expected to have a positive attitude and participate in all activities and field trips. We know that not every class will be everyone’s favorite, and some are more reserved than others. That’s OK! However, excessive disruptions, napping, and cell phone use will not be tolerated during activities!

- Most importantly, we want students to be themselves in a judgement-free environment. While we have specific content we want to cover, we want students to share their interests, engage with other students and staff, make friends, and know that the WINS Program is a safe-haven and home for all WINS girls.