

2015 WEST VIRGINIA GOVERNOR'S SCHOOL FOR MATH AND SCIENCE
(West Virginia State University)
Faculty Application

PERSONAL INFORMATION

Name: _____

E-Mail Address: _____

Mailing Address: _____

Telephone Number: _____

Cell Number: _____

EDUCATION AND EXPERIENCE

Degree(s)

**Provide information for the type of degree you obtained and the school where it was received. If you do not hold a degree listed, write N/A.*

Bachelor's Degree: _____

Master's Degree: _____

Doctoral Degree: _____

Teaching Certification(s): _____

Experience

**Provide information about any teaching experience you have below. List your current teaching position, and the classes you teach or have taught in the past. Current college graduate students may list student teaching experiences, but indicate that the position was as a student teaching position and not a position as a full-time employee.*

Current Teaching Position: _____

Math/Science Courses Currently Teaching or Have Taught: _____

Have you ever taught at Governor's School for Math and Science (GSMS) or Governor's Honors Academy (GHA)? If so, list the year(s). _____

List any other teaching experience(s) that you feel has helped strengthen your ability to teach middle school or adolescents (8th and 9th graders).

REFERENCES

**Provide the names and contact information for two professional references.*

NAME: _____
E-MAIL: _____ PHONE NUMBER: _____

NAME: _____
E-MAIL: _____ PHONE NUMBER: _____

OUTLINE OF CLASS DESCRIPTION/RESEARCH PROJECT PLAN

The theme for the 2015 West Virginia Governor's School for Math and Science at WVSU is "Building a Sustainable Future." Each faculty member will be required to design and teach a class two times (1.5 hours each time) a day for 10 days and conduct a research project with students for 2 hours a day for ten days plus 5 hours on the last day of the program (for a total of 25 hours of research time). **Please include a detailed day-by-day outline of what each day would look like for your class and research time when you submit this application. The selection of faculty members will be based largely on the class description/research project plans submitted by those wishing to be faculty members; therefore, sufficient time should be dedicated to this portion of the application. You do not need to submit full lesson plans, but you must lay out a detailed plan that follows this year's theme in order for the selection committee to follow your idea.*

IMPORTANT NOTE!

This application must be submitted via e-mail to scollin5@wvstateu.edu and Sherry.L.Keffer@wv.gov by Tuesday, April 7, 2015. Administrative staff members will remove the names on each class description/research project plan before giving them to the selection committee so that all applicants can remain anonymous. Please read the information below to get an idea of what this year's GSMS program will look like. Many changes have been made from previous years.

*If you have any questions, please feel free to e-mail the WVSU GSMS director at:
Sean Collins, scollin5@wvstateu.edu*

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DATES: Monday, July 13, 2015 – Sunday, July 26, 2015

TENTATIVE DAILY SCHEDULE:

Breakfast: 7:30 a.m.-8:30 a.m.
Class One: 8:30 a.m.-10:00 a.m.
Break: 10:00 a.m.-10:15 a.m.
Class Two: 10:15 a.m.-11:45 a.m.
Break: 11:45 a.m.-12:00 p.m.
Lunch: 12:00 p.m.-1:00 p.m.
Research Time: 1:00 p.m.-3:00 p.m.
Afternoon Activity: 3:00 p.m.-5:00 p.m.
Dinner: 5:30 p.m.-6:30 p.m.
Evening Activity: 6:30 p.m.—8:30 p.m.

***NOTE:** The first and last day of will not include class time. Day one may include time with research groups. The last day will include presentations delivered by research groups. Faculty does not have to attend afternoon activities, but will attend evening activities, which will vary and are a lot of fun for students and staff.

FIELD TRIPS: There will be two field trips. GSMS will leave for field trips early in the morning and return late at night. All faculty members must supervise students on all field trips.

SALARY: Faculty will be paid \$3,430 for teaching/research at WVSU GSMS.

2015 THEME: Building a Sustainable Future

**Class and research plans need to center around the theme.*

CLASS/RESEARCH TIME:

- While class and research material should both be focused on the program's theme (which may include any math or physical/life science applications), faculty will have a different roster of students in their classes than their research groups. Therefore, the material taught in class and the research project do not have to be directly connected.
- CLASS LESSON PLANS
 - Lesson plans should be structured with a definite plan for the students and teacher to follow during each 1.5 hour session.
 - Each lesson will be taught twice daily
 - Each faculty member is allotted money to purchase materials needed for class (the GSMS directors will purchase the materials and have them available for teachers on a daily basis). Materials will be purchased as needed as the program progresses.

- RESEARCH TIME LESSON PLANS
 - Lesson plans should include a project idea for students to research and then produce a finished product to showcase for parents and students on the last day of the session. Faculty may select the project idea or may allow students to be involved in coming up with their final product to present on the last day; however, if students will be selecting the project, faculty must provide a narrowed down focus of what the research project will include and how they will guide students in determining what the project will be.
 - Each faculty member is allotted money to purchase materials needed for research (the GSMS directors will purchase the materials and have them available for teachers on a daily basis). Materials will be purchased as needed as the program progresses.
 - The same project idea/presentation may be used for both sessions of the program. However, if students are selecting their own research project, teachers may do different projects for each session.
 - Each research group will have between 8-15 students.

SAMPLE CLASS LESSON PLANS/RESEARCH PROJECTS:

As a guideline to help with this application, below is a description of the class/research project that Gretchen Gibson used for the theme “Amusement Parks and Fairs” as a faculty member in 2009. Please note that this is just a short description of what was completed during Governor’s School for Math and Science 2009; when submitting the application, applicants need to give a day-by-day breakdown of what they plan to do with students in addition to an overview of the class and research “big idea.”

CLASS: Students learned about rate of change in the real world. They explored applications of rate of change in terms of algebra (lines) and calculus (curves) and used the concepts to look at velocity and acceleration in the setting of designing amusement park rides.

RESEARCH: Students used mathematics and the concepts of position, velocity, and acceleration to design roller coasters using cardstock and other materials. Students worked in groups of 2-3 people, and they were told that the goal was for a marble to take a 30-second roller coaster ride that included turns and drops. Students researched roller coaster design and safety and then made their own roller coasters. Groups presented their roller coasters to local business people in an attempt to “sell” their designs. The business people scored each group using a scoring rubric (designed by the students) to rank each roller coaster. The highest scoring group was awarded the “contract” to build the roller coaster for the amusement park. Students presented their roller coasters, rubrics, and pictures/written commentary of the process of them designing their roller coasters on the last day of the session for parents/other students to see.