

SCIENCE OLYMPIAD

for High School Students and Teachers

Saturday, November 23, 1974

at

St. Andrews Presbyterian College
Laurinburg, North Carolina

What is the Science Olympiad?

A competitive event designed to test a student's basic knowledge of chemistry, biology and mathematics taught on the secondary level.

An opportunity to meet St. Andrews scientists and to discuss your scientific interests with them on a personal basis.

An opportunity to see the science facilities and major instrumentation in the spacious laboratory at St. Andrews.

An opportunity to have fun while learning about new disciplines.

Who may attend?

The Olympiad is designed for sophomore, junior and senior level high school students and their teachers. It is suggested that each student participate in at least one event. Participation should be limited to top biology, chemistry, physics and math students from each class. The faculty at St. Andrews wants to meet high school teachers in order to learn about their activities.

Who will conduct the Olympiad?

Arthur L. Applegate - Biology

B.S. Wake Forest; M.S. South Carolina
Ph.D. Emory

Interests: embryology, electron microscopy, estuarine ecology, horses

Donald G. Barnes - Division Chairman

B.S. College of Wooster; Ph.D. Florida State

Interests: quantum mechanics, molecular spectroscopy, jogging, civic and church work

John C. Clausz - Chairman, Biology Program

B.A. Ohio Wesleyan; Ph.D. UNC-Chapel Hill
Interests: mycology, microbiology, plant physiology, softball, singing

G. Tyler Miller, Jr. - Chemistry and Human Ecology

B.S. VMI; M.S., Ph.D. Virginia

Interests: physical chemistry, writing and lecturing on environmental problems, paddleball

William H. Morgan - Mathematics

B.S. Appalachian State; M.Ed. UNC-Chapel Hill; Ph.D. Georgia

Interests: logic, golf

William H. Somerville - Chairman, Mathematics Program

B.A. King; Ph.D. UNC-Chapel Hill

Interests: curriculum reform

James F. Stephens - Chemistry

B.S. West Virginia; M.S. Marshall; Ph.D. Tennessee

Interests: nuclear magnetic resonance and hydration numbers, horticulture

Clarence E. Styron - Biology

B.S. Davidson; M.S., Ph.D. Emory

Interests: radiation ecology, marine ecology, aquaria, photography

David E. Wetmore - Chairman, Chemistry Program

B.A. Park; M.A. Kansas; Ph.D. Texas A&M

Interests: chemistry of odor, horses, backpacking, rock climbing

What else will take place at the Olympiad?

Demonstrations on holograms, chemical magic, electron microscopy.

Tours of the science laboratory and instrumentation.

Meet St. Andrews scientists and mathematicians to discuss your interests.

High School students may bring their own scientific displays to share with others.

What are the activities and events?

The following are tentative events. Some may be dropped due to lack of interest.
The demonstrations are guaranteed.

9:00 a.m. REGISTRATION for events and demonstrations
Students set up displays

9:45 a.m. WELCOME ADDRESS - Dr. Donald G. Barnes
Explanation of Events

10:30 a.m. EVENTS

Titration Race

The fastest and most accurate titration of an acid.
For chemistry students.

Science Scavenger Hunt

Participants will be given a list of items by scientific designation. For example, gymnosperm leaf = pine leaf. For biology students.

High School Science Bowl

Each high school may enter one team of four top science students to compete with teams from other schools on general science and math topics.

DEMONSTRATION

Lasers and Holography

Demonstration of 3-D photography with a laser.

11:30 a.m. EVENTS

Chamber of Horrors

We show you an experiment that answers a particular question. You tell us what the question is. For physics students.

Periodic Table Quiz

For chemistry students

Colony Counter Race

We provide you with photographs of colonies of organisms and a counter. You count. For biology students.

DEMONSTRATION

Chemical Magic

Demonstration of the mysterious world of chemistry.

12:30 p.m. LUNCH at St. Andrews Cafeteria next to Lake Moore.
\$1.55 payable at cafeteria door.

1:30 p.m. EVENTS

Full Beaker Race.
Pure fun for all.

Identification of Ions and Solids
How well do you know chemicals? For chemistry students.

Name that Organ
For biology and zoology students.

DEMONSTRATION

The Electron Microscope
You will have an opportunity to use it.

2:30 p.m. EVENTS

Frog Jumping Contest
Pure fun. Bring your own frog or use one of our house frogs.

Verbal Logic Competition
Math teasers for math students.

DEMONSTRATION

How To Take an EKG
For students interested in medicine.

3:30 p.m. AWARDS ASSEMBLY

Top winners in each category will be recognized. Certificates of achievement will be awarded to all participants.

FILMS AND VIDEOTAPED DEMONSTRATIONS OF SCIENTIFIC EQUIPMENT will take place throughout the day.

Other instructions

Each student must wear a name tag of his own design listing his name, speciality and high school.

Judging of scientific displays will take place throughout the day when student is not competing in another event.

REGISTRATION FORM

Please return this form with fees prior to November 5, 1974 to

Dr. David E. Wetmore
Science Olympiad
St. Andrews Presbyterian College
Laurinburg, North Carolina 28352

YES! I will attend the Science Olympiad.

Registration fee: \$1.00 per student. Teachers are free.
Make check payable to St. Andrews College. Amount enclosed: \$ _____

As far as I can tell, my students will enter the following:

Name of Event	Number of Students
_____	_____
_____	_____
_____	_____
_____	_____

The following students would like to enter exhibits:

Name of Student	Title	Description
_____	_____	_____
_____	_____	_____
_____	_____	_____

(Use other side for additional entries)

How many wish to eat at St. Andrews (\$1.55 payable at cafeteria)? _____

Your Name _____

Title _____

School _____

Home Phone _____

Participating Schools in the Science Olympiad
at St. Andrews Presbyterian College
Laurinburg, North Carolina

Hammond Academy, Columbia, South Carolina
Mullins High School, Mullins, South Carolina
Greenwood High School, Greenwood, South Carolina
Forest Hills High School, Marshville, North Carolina
East Union Middle School, Monroe, North Carolina
Franklinton High School, Franklinton, North Carolina
Northeastern High School, Elizabeth City, North Carolina
Northern High School, Durham, North Carolina
Western Guilford High School, Greensboro, North Carolina
East Duplin High School, Beulaville, North Carolina
Dunn High School, Dunn, North Carolina
Richmond Senior High School, Rockingham, North Carolina
North Davidson Senior High School, Lexington, North Carolina
Fuquay-Varina High School, Fuquay-Varina, ~~Virginia~~ N. C.
West Springfield High School, Springfield, Virginia