

APPLICATION KIT

The RUTGERS YOUNG SCHOLARS PROGRAM in DISCRETE MATHEMATICS

July 9 - August 3, 2001

"Our Twelfth Summer"

"We're looking for students who are interested in math. Is that you?"

The Rutgers Young Scholars Program in Discrete Mathematics is sponsored by the Rutgers University Center for Mathematics, Science, and Computer Education, which conducts the program, and the Center for Discrete Mathematics and Theoretical Computer Science [DIMACS] -- a consortium of Rutgers and Princeton Universities, AT&T Laboratories, Bell Labs, Bellcore, and NEC Research Institute. Generous funding is provided by the AT&T Foundation and DIMACS.

Do you ...

- ... *like to work on challenging and puzzling problems*
- ... *like to look at a problem in many different ways*
- ... *get involved, make conjectures, and take risks*
- ... *enjoy the critical exchange of ideas with other students*
- ... *look forward to living in the math world for a month*
- ... *enjoy and feel compelled to do mathematics*
- ... *thrive on complexity and problems which have more than one answer*
- ... *like to reason out problems and play with concepts*
- ... *learn new material quickly and apply this learning to new situations*
- ... *concentrate on something you like for a long period of time*

Then this program is for you. Here is your opportunity to ...

- ... *experiment with some interesting mathematical problems*
- ... *spend four weeks on a college campus doing mathematics with people like yourself*
- ... *meet a variety of professional mathematicians and learn about what they do*

Come to the Rutgers Young Scholars Program ...

- ... *come join 30 high school students who share your fascination with mathematics.*
- ... *attend a variety of mathematical programs and activities ... including sessions on discrete mathematics, discussions, hands-on computer activities, and field trips.*
- ... *learn about careers in the mathematical sciences; these programs will involve industrial as well as academic mathematicians.*

The instructional staff includes well-known mathematicians. Teaching assistants who are graduate and undergraduate Rutgers students majoring in mathematics or computer science provide additional academic support. You will spend a lot of time with this staff; we hope that as a result you will understand what mathematicians do and why.

The focus of the program will be discrete mathematics, although the program will **not** be conducted like a course. Success will be measured in terms of your enthusiasm for the subject, not by the amount of material covered.

Your daily schedule will be full and will include various recreational and social activities.

Remember, this will be an intensive program. We will expect you to participate actively in all of the activities. It will be fun and exciting, but it will require your concentrated effort. Be sure that you want to make this commitment!

COMPLETING APPLICATION MATERIALS

A completed application includes all of the following:

1. TYPED OR PRINTED (in black ink) responses to the questions on the Student Application Form;
2. a completed parent signature form;
3. a completed financial assistance form if applying for financial assistance;
4. a letter of recommendation from your teacher, who should mail the recommendation directly to our office, as well as a copy of your transcript of your high school record.
5. you will also be expected to submit your solutions to the 2000 Problems to Explore (partial or complete). Please make sure to show all work when working on your solutions and send that in with your solutions. We recommend that you make a photocopy of your solutions prior to sending them in for safe-keeping and also in case we call to discuss your responses,

MAILING INSTRUCTIONS

Please send the completed forms via First Class Mail. Because of the various weights of the enclosures, it would be wise to verify the correct postage to assure prompt delivery.

For early admission to The Rutgers Young Scholars Program send in your completed application by March 23, 2001. After that date applications will be reviewed on a first-come first-serve basis until the program is filled. All materials should be returned to the following address as soon as possible.

RETURN MATERIALS TO: CMSCE
ATTN.: Young Scholars Program
P.O. Box 10867
New Brunswick, N.J. 08906-0867

RUTGERS YOUNG SCHOLARS PROGRAM :: SUMMER 2001 STUDENT APPLICATION FORM

Student Name

Student Address Phone ()

City State Zip

Social Security Number Date of Birth Class of 2002 2003 2004

Female Male Email Address

High School School phone ()

School Address

City State Zip

Name of Teacher would will provide the Recommendation

List the math courses you will have completed by July:

.....

List the math courses you plan to take next year:

.....

If you have previously attended a summer academic program, please name the program[s] and date[s]:

.....

Optional (used for statistical purposes)

How would you best describe yourself (please check one):

- | | |
|--|---|
| <input type="checkbox"/> Native American | <input type="checkbox"/> Hispanic(including Puerto Rican) |
| <input type="checkbox"/> Asian or Pacific Islander (including Indian subcontinent) | <input type="checkbox"/> White, Anglo, Caucasian |
| <input type="checkbox"/> African American | <input type="checkbox"/> Other (Specify) |

List any friends or relatives who have attended the Young Scholars Program:

Name: Year

How did you learn about the program? (You may check more than one)

- | | |
|--|--|
| <input type="checkbox"/> Attended "A Taste of YSP" Program | <input type="checkbox"/> Parents/Relatives |
| <input type="checkbox"/> Teacher Recommended | <input type="checkbox"/> Former Program Student/Alumni |
| <input type="checkbox"/> Guidance Counselor | <input type="checkbox"/> Brochure |
| <input type="checkbox"/> YSP Website | |
| <input type="checkbox"/> Newspaper or Publication (name and section) | |
| <input type="checkbox"/> Summer Program Guide (name and section) | |
| <input type="checkbox"/> Other (please explain) | |

To The Candidate

Please print your name below and give this form to a parent or guardian to complete. Both parents may complete the form together, if they wish.

CANDIDATE'S NAME

To The Parent or Guardian

Your daughter/son is applying for admission to the Rutgers Young Scholars Program in Discrete Mathematics, a four-week, summer, residential program for mathematically talented high School students. The program will take place on the Rutgers University Busch Campus in Piscataway between the dates of July 9 - August 3, 2001. Participants will stay in the residence halls and return home on weekends.

The cost of the program will be \$2,400 for those who can afford it; this will cover tuition, materials, meals, and lodging. A few partial and full scholarships are available. **No student should be discouraged from applying because of financial considerations.** If applying for financial assistance please complete the enclosed application form for financial assistance.

Please indicate here any special considerations (medical, physical, emotional, psychological, etc.) we should be aware of in terms of our responsibility to your child's education and general well-being for a month. This information will be kept strictly confidential. (You may use the back side of this page if you need additional space)

Special Considerations: _____

Permission

"My daughter/son has permission to attend the Rutgers Young Scholars Program for the entire four week program (excluding weekends) from July 9 - August 3, 2001"

Your Name (please print)

Relationship to Candidate

Home Address

City

State

Zip

Daytime telephone

Evening telephone

email

Signature of parent or legal guardian

INSTRUCTIONS:

On this form, please tell us about the student you are recommending for the Rutgers Young Scholars Program in Discrete Mathematics.

Include information about the student's performance (including cumulative average and PSAT/SAT scores if available) and attach a transcript of the student's high school record.

Tell us about your student's abilities and interests, about the personal characteristics that make her or him most likely to benefit from and enjoy a four-week intensive exposure to a program in the mathematical sciences. Include specific examples drawn from your own experiences with the student.

Please write your remarks on the other side of this page and continue on a separate sheet of paper. Please be sure to write your student's full name in your recommendation.

STUDENT NAME: _____

In view of this student's interest and ability in mathematics, I recommend that s/he be accepted to the Rutgers Young Scholars Program in Discrete Mathematics.

Signature of recommending teacher _____

Name (please print) _____

Home Phone Number () _____ Home Address _____

City _____ State _____ Zip _____

School _____ School Phone Number () _____

School Address _____

City _____ State _____ Zip _____ Email: _____

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Application for Financial Assistance

There are only a limited number of scholarships. The information requested below is used to assess financial need only and has no bearing on admissions decisions. When completing the application, please type or use a pen with black or dark ink and print clearly. Only completed applications will be considered. Applications must be received by May 1, 2001; later applications will be considered only if resources are available.

Please include copies of both parents' W-2 forms for 2000, most recent pay stubs, and a xerox copy of all pages of both parents 2000 tax forms. No application will be considered without a copy of the 2000 returns from both parents regardless of marital status. On a separate sheet of paper, please feel free to provide any additional financial information that should be taken into consideration when evaluating financial need.

Name of Student _____ I am requesting that the fee of \$2400 be reduced by \$ _____

Name of person completing the form _____

Relationship (check one): Father Stepfather Mother Stepmother Legal guardian

Address _____

City _____ State _____ Zip _____ Country _____

Parent's current marital status Married Separated Divorced Widowed

Father's occupation _____ Position within the Company _____

Name employer _____ Address of employer _____

Father's monthly Income _____ Day time phone _____

Mother's occupation _____ Position within the Company _____

Name of employer _____ Address of employer _____

Mother's monthly Income _____ Day time phone _____

Residence: Rent Own Monthly Rent or Mortgage \$ _____ Number of dependent children _____

Please check if you have the following: Checking Account Saving Account/CD's Stock/Bonds

Certification All of the information is true and complete to the best of my knowledge.

Signature of person completing this form

Date