ANNA R. SILVERSTEIN Department of Mathematics New York Institute of Technology Old Westbury, NY 11568 Math Center: (516) 686-1092

EDUCATION	١	
Undergradua	ate	
	9/68 to 6/70	Vassar College
	9/70 to 6/72	Princeton University, Princeton NJ
		B.A., 1972
		National Merit Scholarship
Graduate	9/72 to 1/77	Rutgers University, New Brunswick NJ
		Ph.D. in Mathematics, 1977
	2/88 to 2/90	New York Institute of Technology
		Part-time study for Masters in Computer Science

PROFESSIONAL EXPERIENCE

Associate Professor in Mathematics, 1982 to present, New York Institute of Technology, Old Westbury, NY

- Effectively teach a wide range of courses—Precalculus and all levels of Calculus plus Linear Algebra. Emphasis on a personal approach. Communication techniques include: individual conferences, Math Center tutoring, weekly quizzes, the WebAssign homework platform, extra review sessions. The Canvas learning management system is a great help for displaying course announcements, quiz goals, supplementary materials and video activities I have created. For classes which are taught remotely, I teach using a doc-cam and frequently post the Zoom recording plus a scan of the notes. I continually work on improving my communication of the topics I teach; the challenge is overcoming gaps in student knowledge due to the pandemic.
- We are frequently called on to offer remote instruction to some, while teaching others inperson. I have made the most of the technology available, including using a doc-cam so that those at home can follow the lesson easily, while those in school can watch the notes unfold on a classroom monitor.
- Director since 2009 of the Math Resource Center at Old Westbury. I now head up the Center for both New York campuses. The Center, originally created by Math Chair Ranja Roy, provides assistance exclusively by math faculty for all math students. Conducted an initial pilot project for two lower-level courses with Prof. Roy. Continuing responsibilities include: supervision of faculty tutors; setting up schedules to make sure that faculty are available at peak times; creation of online assessment instruments; continual monitoring of the faculty schedule to ensure optimum use of limited resources; advisement of incoming students regarding their placement. I work closely with Academic Advisement to ensure the best possible counseling experience for students. The transition to remote teaching as a result of Covid-19 involved special challenges for the Math Center, particularly in record

keeping: I held training sessions on the use of NYIT's EAB software in order to have an accurate tally of student attendance. In addition, I worked with the faculty on supporting the transition to WebAssign; we assigned specific tutors experienced in this platform to be available to students. In the fall of 2023, the EAB software failed and I was able to replace it with an updated Google tool. The collected data on student participation can be shared with academic advisers and concerned administrators.

- Mathematics Department Assessment Chair. This project involves collection of statistics from school databases and from faculty members of affected courses, especially the gateway course Calculus I; preparation of the text and graphics for the reports; and presentation of the results to the faculty to optimize our teaching strategies. For the current year, assessment will involve evalution of a pilot program, led by Dr. Yael Roitberg, and a precalculus bootcamp, led by Dr. Vitaly Katsnelson. Software used includes SPSS and Excel.
- Created weekly videos to supplement instruction in the following courses: Applied Statistics, Calculus II, and Linear Algebra. These videos enable students to get a "sneak peek" at upcoming material, which increases the readiness before a new topic. Each video features questions the student has to answer to show understanding of the topics presented.
- Presented numerous lessons on Canvas to the department as a group and to individual faculty through Zoom. Topics included creation of videos using the Studio feature, embedding outside videos, and creation of tests and quizzes.
- Chair of the Department Personnel Committee, which reviews all reappointments as well as promotion and tenure. This position entails writing of personnel reports based on the candidate
- Served on the committee to create a new Applied and Computational Mathematics major: assisted in writing the proposal and in researching offerings of competing schools. I led the promotion in 2020-21 of this major, including our Applied and Computational Evening in January 2021. Our virtual flyer was distributed to local high schools through the services of Stan Silverman and the Technology-Based Learning Systems department. To create the flyer, I converted short PowerPoint presentations from various faculty members into YouTube videos which were then embedded into the document. In the process, I created an "NYIT Math" YouTube channel featuring discussions of student and faculty research at the college.
- Revamped the NYIT mathematics webpages including our minor and major programs and worked with our web designers to optimize the links (with Ranja Roy).
- Chair of the Department Personnel Committee since fall 2019: Consult with the other department members on reappointments culminating in the writing of thorough reports on each.

- Created a unit on SPSS for the Applied Statistics course. This effort involved learning the software, setting up hands-on lab sessions for the students, and preparation of step-by-step instructions to guide students through the goals of the unit.
- Coordination of math placement (with Ranja Roy, Meryle Kohn, Monika Schueren, and Meyer Yousha). In 2016 a new math placement system was created to replace Compass (discontinued by ACT). This effort involved creating new placement tests with advisement from the departments.
- Participated in a project led by Stan Silverman to review available software on the Internet for three of our key courses.
- Taught a variety of online courses in the regular NYIT curriculum as well as for Ellis College; wrote web-based modules covering all topics for each; ran archived "chat rooms" in which key examples were presented and discussed.
- Creation of a department website, including bio pages for individual faculty, general information about the department and links to important sites including homework help sites.
- Served in NYIT Senate, involved in oversight of Ellis College and served on the Educational Technology Committee.
- Co-developed Mathematics Education major. This effort included creation of a new course, Introduction to Sets and Logic. I also advised students in the program.
- Worked within the department to integrate graphing calculators into instruction in all courses. This effort involves preparation of printed materials for a variety of calculator models and authoring utility programs to help achieve pedagogical goals.
- Preparation of written guidelines and presentation of hands-on seminars to assist faculty in use of software, e-mail and web browsing. Troubleshooting and consultation on all aspects of technology. One of my seminars was attended by every member of both the Mathematics and Physics departments.
- Developed and implemented a one-year precalculus course with various microcomputer components under a Title III grant. Collaboration with other math faculty as well as computer specialists. My contributions included writing a lab manual for exploration in the computer language LOGO.

Assistant Professor in Mathematics, 1977-1982, LaGuardia Community College, Long Island City, NY

• Developed an interdisciplinary curriculum in computer science jointly with the data processing faculty.

• Presented a minicourse on Basic programming to the math faculty.

Instructor in Mathematics, 1/77 to 6/77, Rutgers University, New Brunswick NJ

Coordinator for Developmental Mathematics program

PUBLICATIONS

"Vector spaces over T-fields" (abstract), Journal of Symbolic Logic, 1978, vol. 43, p. 365.

"A generalization of combinatorial operators," *Notre Dame Journal of Formal Logic*, 1978, vol. 19, pp. 639-645.

"Computer-enhanced learning in algebra and trigonometry: an eclectic approach" (with Jo Ann Comito and Meryle Kohn), in: *Microcomputers and Basic Skills in College*, Geoffrey Akst, editor, CUNY Instructional Resource Center, 1984, pp. 77-82.

Modules for Technical Math and Algebra-Trigonometry (with Y. Roitberg, H. Schrenzel, M. Weisser), ERIC, 1988.

CONTRIBUTED TALKS

"Vector spaces over T-fields," presented at meeting of the Association for Symbolic Logic, St. Louis, 1977.

"Computer-enhanced learning in algebra and trigonometry" (with M. Kohn and J. Comito), presented at the Microcomputers in Education conference, Long Island University, Brooklyn, April 1984.

"Linking Mathematics and Business" (with F. Gordon and S. Petrushka), presented by Dr. Gordon at meeting of the Mathematical Association of America, San Antonio, January 1999.

"Surfing the 'Net," presented to the NYIT Math Department, April 1999.

"More on the Computer: e-mail, attachments, creating your own web pages," presented to the NYIT Math and Physics Departments, March 2000.