# MATH • SCIENCE • NURSING • ALUMNI

MORNINGSIDE COLLEGE, SIOUX CITY, IOWA

SUMMER, 1984

#### Biology Department Curriculum Revision

A two year study of the biology department curriculum has resulted in some course changes and course restructuring. The process of curriculum assessment has included two activities:

1. A survey was made of course offerings and major requirements in biology departments of twenty-five other colleges throughout Iowa and in nearby states. Morningside's offerings and major requirements were then compared to them.

2. A statement outlining the philosophy, priorities, and desirable practices of the biology department was developed. From this statement, the department evaluated each course in terms of desirable practices for biology courses including laboratory experience, research experience, field experience, introduction to current topics, writing and research skills, and computer use.

A field biology emphasis was added to strengthen the offerings of the department which are not health related. Four courses will provide for the study of plants and animals found in the many diverse ecosystems of the Siouxland region--rivers, lakes, marshes, prairies, farmland, loess hills, woodland and sand dunes. These courses include the natural history of animals and plants, invertebrate zoology, ecology and field biology. Funding for the development of these offerings has been obtained through a federal Title III grant.

The new curriculum is being phased in over a three year period. Dr. Harold Rundell taught the invertebrate zoology course in the fall of 1983. A biology seminar/research course for juniors and seniors was added in the spring. This coming fall the field biology course will

be offered for the first time. All courses in the revised curriculum will be offered at least every other year. It is anticipated that the process of curriculum development will be ongoing to reflect the times and new information in fields related to biology. Other topics presently being considered for more emphasis include immunology, evolution and careers in biology.

To accompany the curriculum changes a number of improvements have been made in facilities and equipment in the department. New cabinetry has been installed in the microbiology laboratory, the preparatory/research laboratory, and the general purpose laboratory which is used for zoology and botany. The wiring in the laboratories has been updated, and the storeroom has been renovated. A new physiograph, a spectrometer, a pH meter, an APPLE microcomputer, two salt water aquariums, a boat, and numerous field equipment items have been added to the department's inventory in support of the curriculum adjustments.

The biology faculty is thoroughly excited by the changes in the department and is looking forward to the full im-

plementation of the new curriculum.

In 1980 Jane joined the Biology Department at Morningside as a full-time professor and coordinator of a federal Title III grant to the department. While teaching courses in microbiology and physiology, she directed the development of an interdisciplinary science course. After two years she was promoted to chair of the department. As chair, Jane has skillfully led her department through a significant revision of the biology curriculum and the institution of a field biology emphasis in the major. She has been an active member of the faculty and this year was elected chair of the Faculty Senate--a measure of the esteem in which she is held by her colleagues.

The breadth of Jane's interest is evident in two recent appointments. From 1980 to 1983 she was the Northwest Iowa Energy Education Coordinator for the Department of Public Instruction's project on energy and the environment. As coordinator Jane worked with area

# Faculty Focus: Jane Hey

Do you know what Jane Hey and Ronald Reagan have in common? They both claim Dixon, IL, as their hometown. There the analogy ends.

Jane, the recently appointed chair of the Biology Department, has such a diversified background and has worn so many "hats" that one almost needs a small monograph to describe her varied background and interests. Jane's undergraduate degree in biology is from Monmouth College, a private liberal arts college in Illinois. She received her M.S. in preventive medicine and environmental health from Iowa University (1966) and then went to the University of Wisconsin where she worked for two years on a doctoral program in physiology, parasitology, and ecology. Jane taught in the Biology Department at Briar Cliff from 1970 to 1972 and then became research director of the Missouri River Aquatic Ecology Study Project. The Project was funded by Iowa Public Service Company and was designed to determine the impact of the developing IPS Port Neal power complex on the Missouri River. In the capacity of project director Jane supervised student research assistants, was responsible for the coor-



Jane Hey demonstrates equipment with senior Paul Parmalee.

dination of consultants and the analysis of data, and prepared the environmental impact statements for IPS. In 1977 the Project was relocated at Morningside College where it has been based ever since. The unique relationship forged by Jane between industry (IPS) and the academic community is quite rare, especially for a private college. In this same period she was a consultant for the University of Iowa and environmental engineering firms which were performing fisheries and terrestrial ecology surveys in Iowa.

# Meet the Nursing Faculty

The Department of Nursing Education is pleased to introduce the nursing faculty

to you.

Kathy Buchheit. A native of Chicago, Illinois, Mrs. Buchheit earned her BSN at the College of St. Teresa, Winona, Minnesota, and her MN (in psychiatric nursing) at Wichita State University. She teaches fundamentals of nursing and gerontological nursing in the N201 course and psychiatric nursing in the N302 course. Mrs. Buchheit was honored this Spring with the Nursing Faculty of the Year Award by the Morningside Nurses' Club.

Patricia Coughlon. Mrs. Coughlon comes to the Department in the role of a Family Health Nurse Clinician. She has a BSN from the University of Kansas and anticipates completion of her MSN from Creighton University in December. Mrs. Coughlon teaches family and community health in the N301 and N302 courses.

Sharon French. A native of Sioux City, Mrs. French holds a diploma from St. Lukes School of Nursing, and a BSN from Briar Cliff College. She is currently working toward a MSN in maternal-child health nursing at the University of Nebraska at Omaha. She maintains her clinical expertise by devoting clinical time to the obstetrical unit in a local hospital and by teaching childbirth classes. She teaches maternity nursing in N202 and pediatric nursing in N301.

Kim Hansen. Mrs. Hansen is the Learning Arts Laboratory Director. She earned an AD in Nursing from Western Iowa Tech Community College and a BS in Psychology from Westmar College. She currently is working toward a BSN at Briar Cliff College. Mrs. Hansen has served as the Morningside College Nurses' Club advisor during this past year.

Eileen Kohlenberg. A native of Sioux City, Mrs. Kohlenberg chairs the Department of Nursing Education. She received a BSN and a BS in Psychology from Morningside College and an MSN in medical-surgical nursing from the University of Texas at Austin. Mrs. Kohlenberg is currently pursuing a Ph.D. in nursing administration from the University of Texas at Austin. She has served as the President of the Morningside College Women's Club this year.

Richard Petersen. A specialist in trauma and administrative nursing, Mr. Petersen comes to the Department with a BSN from Morningside College and a MSN from the University of Texas at Arlington. He teaches critical care nursing in N401 and leadership and management in N402. Mr. Petersen was recently honored as one of the Outstanding Young Men in America. He practices trauma nursing the emergency room of a local hospital.

Carol Searls. Mrs. Searls received her BS in Nursing from South Dakota State University and is presently completing an MS in Adult Nursing at the same institution. Carol teaches medical-surgical nursing in N301 and N302. She was recently honored as a Nurse of Hope in Iowa by the American Cancer Society.

LaVone Sopher. A native of Harlan, Iowa, Ms. Sopher joins the faculty as a specialist in trauma nursing. She received her BSN at Morningside College and her MSN at the University of Texas at Arlington. She teaches critical care nursing in N401 and leadership and management in N402. She maintains her clinical expertise by working in the emergency room of a local Sioux City hospital.



Left to right: LaVone Sopher, Carol Searls, Kathleen Buchheit, Rick Peterson, Kim Hansen Patty Coughlin, Sharon French and Eileen Kohlenberg, Chairperson, Nursing Education Dept.

# Maud Adams Nursing Research Day

The Second Annual Maud Adams Nursing Reserach Day was hosted by the Morningside Nurses' Club on April 19, 1984. Fifty sophomore, junior, and senior nursing students presented panel discussions, teaching projects, and pilot studies on a variety of health care topics.

The keynote speaker for the event was Kay Krigsten Myers, Executive Director of the Iowa Nurses' Association. Her address, entitled "Nursing Heroes," focused on nurses in Iowa who have made outstanding contributions to the profession of nursing. She encouraged the nursing students to become actively involved in their professional organizations.

Following the address, the Nursing Faculty of the Year was named by the Student Nurses' Club. Kathy Buchheit was the recipient of this award. Professor Buchheit teaches fundamentals of nursing, gerontological nursing, and psychiatric nursing. She received her Master of Nursing degree in psychiatric nursing from Wichita State University.

The Research Day climaxed with the pinning of the senior nursing students. Traditionally, each graduate of the nursing program has received a gold pin with a Caduceus encircled by a band of blue and gold with gold letters denoting Morningside College, BSN. The following graduating seniors received pins: Becky Appel, Betty Bjork, Annette Bumann, Jane Boes, Sue Carlson, Dave Goodwin, Terri Grell, Ann Gustafson, Patty Handlos, Rachel Harmeyer, Elaine Hoffmann, Brenda Klynsma, Carl Jo Tierno, Geraldine Tookey, Marie Uhlenkamp, Sharon VanWettering, and Tamra Wilcox.

The Second Annual Nursing Research Day was dedicated to Maud Adams who epitomizes nursing in the eyes of her students and colleagues. Professor Adams taught in the Department of Nursing Education from 1974 to 1983, chairing the Department in the 1982-83 year unitl her retirement.

#### An Apple A Day Keeps the...

Senior nursing students are finding new ways to review for the National Council Licensure Examination for registered nurse licensure. Using the Apple IIe located in the Nursing Department, students are utilizing software which simulates the licensure examination. An assessment mode permits individual as well as class analysis of the results of the simulated test. A drill and practice mode also is available for continuous feedback to the student. All in all, students agree that "An Apple A Day" is a healthy way to prepare for licensure examinations.

## Academic Improvement Fund Established

At its fall, 1983, meeting the College's Board of Directors established an Academic Capital Improvement Fund which was earmarked for the purchase of equipment to improve the academic program. The fund totaled \$50,000. Items were funded from four of the academic divisions including a \$14,000 light board for Klinger-Neal Theater and a word processor for the English Department. In the Mathematical Science/Natural Science/Nursing Division the following purchases were made: (1) Chemistry--an infrared spectrophotometer, an explosionproof refrigerator, and flammable reagent cabinets, (2) Nursing--an APPLE IIe and accompanying software, (3) Physics--an oscilloscope, two multimeters, and microcomputer accessores, (4) Biology--

student microscopes, improved lighting and new cabinetry for room 205-A, and (5) Mathematical Sciences--a large screen (computer) monitor for Jacobsen room 3. A small student fee will be accessed in 1984-85 to secure another \$45,000 for the fund.

In a related decision the Board at its spring, 1984, meeting approved the construction of a special chemical storage facility in Jones Hall. All chemical storage will now be consolidated in this fireproof facility.

These actions by the Board emphasize the College's committment to a quality academic program. The acquisitions made this year have definitely enhanced the quality of the programs in the division.

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# New Mathematics Faculty

Dr. Zorabi Honargohar joined the mathematics faculty this past fall. Dr. Honargohar has his master's degree in mathematics from Eastern New Mexico University and his Ph.D. in mathematics (1981) from Colorado State University. He has taught for five years in his native Iran including a position as Dean of the School of Sciences at the University of Marine Sciences, Tehran. He has also taught for five years at Colorado State University, first as a graduate teaching assistant and then for one full year after completing his doctoral degree.

Dr. Honargohar has a natural inclination towards the environment in a liberal arts college. In addition to considerable expertise in his discipline he is conversant in English (fluently), Armenian, Assyrian, Arabic, Turkish, and Italian. He is an avid chess player and soccer fan. The College is delighted to welcome Dr. Honargohar, his wife Zoya, and their two sons. Zorabi has joined right in this year in the affairs of the department and has already developed his computer skills to the point that he is teaching some of the introductory computer science courses

for liberal arts students.

## Chemistry Prof Receives Award

Dr. Edward Shane, Associate Professor of Chemistry, was honored in the 1982-83 school year with the student body's Faculty Person of the Year Award. Dr. Shane joined the faculty in 1975 and was appointed two years ago to the position of Division Chair. As a part of the Collge's sabbatical leave program Dr. Shane has also spent the last two summers doing research at the University of New Hampshire. He has been working to develop a fluorescence spectroscopy technique for the detection of toxic polynuclear aromatic hydrocarbons in the (water) environment. A paper on this research was presented at the spring meeting of the Iowa Academy of Science.



Dr. Shane and Patrick Foster, sophomore from Primghar, Iowa

# **Update: Computer Science**

Six data processing professionals from the Sioux City area have met with the Mathematical Sciences Department to help analyze and improve the new major in the business applications area of computer science. The local advisory committee consists of John Coleman of IBP, Kerry Frampton of K & F Enterprises, Dan Graybill from the Woodbury Tax Research Conference, Mike Green from Williams and Company, Larry Hames

from Metz Baking, and Dick Kane from IPS. The committee will be considering what offerings should be given through the night program, how to strengthen the major and the minor, internships, and any other topics that can help our department better meet the needs of the local firms dealing with data processing.

Our department has supported the community with workshops for the Sioux City Junior League, the Certificate in

#### Biology Faculty Member Retires

Dr. Morgan Webb is retiring after nineteen years of teaching at Morningside. During his years in the Biology Department, Dr. Webb taught human anatomy, human physiolgy, natural science biology, senior seminar, genetics, entomology, ornithology and ecology. Affectionately remembered for the way he strolled across campus to Jones Hall, Morgan was always willing to discuss birds, and many other topics with students, faculty and staff. Dr. Webb is an active ornithologist and will undoubtedly continue his interests and travel in coming years.

Best wishes, Morgan.

Management program and with several BASIC courses offered for junior high youth. The College for Youth Program aimed at gifted and talented students in grades 3 through 8 has several courses in BASIC and in mathematics this summer. The annual computer programming contest this April was won by the team representing Hartington, Nebraska, in a field of seven schools.

#### You Can Help Too!

This past fall Mr. Jeffrey Pietsch ('81) arranged the donation to the Chemistry Department of two Bendix gas chromatographs and an accompanying Bendix digital integrator. The donation was made by Jeff's employer, the Stauffer Chemical Company of Omaha. The two high quality gas chromatographs nicely complement the department's chromatographic instrumentation.

Perhaps your company would consider the donation of an instrument in return for our good will and a tax write-off. Instrumentation and equipment that we could use includes: recorders, water baths, spectrophotometers, chromatographs, microcomputers, oscilloscopes, microscopes, etc. Any equipment in good working order would be appreciated. Contact Dr. Edward Shane, Chemistry Department, or Mr. Thomas Trevathan, Director of Development, if you would like to pursue such a donation.

### Hey (Con't. from front)

teachers to encourage the use of available energy curricula in the classroom. This past year Jane was appointed to the prestigious seven-member Iowa Preserves Board. The Board is responsible for the oversight of existing State preserves, the evaluation of potential preserves, and the sponsorship of research related to the preserves.

Personally you will find Jane to be both charming and challenging. She and

#### Send a Student to M.C.

The College finds that many of the students who matriculate have had direct contacts with the College through parents, friends, or alumni. If you know of students who are seeking a challenging academic program in the sciences, mathematics, or nursing, send us their name. We will see that they receive additional information on the division and the College. Send your referrals to: Mr. Fred Erbes, Director of Admissions, Morningside College, Sioux City, Iowa 51106.

#### An Invitation

It is hoped that this publication will be both our NEWSLETTER and your NEWSLETTER. All alumni and friends of the College are encouraged to contribute to or recommend items for inclusion in the NEWSLETTER. Please direct your comments to Dr. Edward Shane, Division Chair, Mathematical Science/Natural Sciences/Nursing Division. We want to hear from you!

#### Pharmacy Students Receive Honors

We tend to send students off for advanced study in spurts. This past year our first students in several years decided to pursue a career in pharmacy. Three Morningside students applied to and were accepted into the pharmacy program at Creighton University, Omaha. All three made the Dean's List in their first semester at Creighton, a feat achieved by only three other students out of the first year class of eighty-six. Congratulations to Michael Padomek, Lori Salmon, and Julie Vogel.

her family live out their concern for the environment. They are agressive "homesteaders" of a thirty-nine acre plot of land on the edge of Sioux City. There the Heys have built an energy efficient home and are working to develop a model area with respect to plant and animal diversity. Jane will gladly give you the cook's tour of their gardens, fruit orchard, bee farm, or their growing (mini) goat herd.

Jane is an exciting addition to the faculty, a true asset to the College. Her strong commitment to the liberal arts is evident in the writing and seminar components which she has introduced in her classes. Her enthusiasm for her discipline is infectious. Jane's students learn not just biology but how biology affects all facets of their lives. The Biology Department is fortunate to have such a strong liberal arts advocate as its chair.

# NEWSLETTER

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