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Rose Returns To 'Early' Start For 1970-71 Year

Rose Polytechnic, which for the last few years has resumed Fall classes a full two weeks behind other colleges and universities in the state, will get back in step with other collegiate calendars when students return for the 1970-71 academic year in early September.

The school's second freshman class of over 350 men is scheduled to arrive on Thursday, Sept. 3 for orientation which will extend into the Labor Day Weekend. Upperclassmen will return the following Tuesday to register for classes commencing on Thursday.

The summer vacation was extremely short this year (the Spring term ended June 12), but the payoff will come when the '70-71 academic year draws to a close the last week in May. The move to the earlier calendar was made in order to put students in a better position for summer employment.

Homecoming '70 is scheduled for the weekend of Oct. 23-24 and will be the traditional high point of the Fall quarter. The Fall term will end on the eve of Thanksgiving (Nov. 25) and be followed by an 11-day break before the Winter term begins on Dec. 7.

Calendar on page 2

Faculty Research Aimed at Helping Students over Frosh Academic Hurdles

Unlike Avis, members of the Rose Polytechnic Institute faculty are not running second . . . they try harder because they see the need for improvement in science and engineering teaching.

One such group of Rose teachers is the four-man team working on campus this summer under the recently acquired \$140,000 College Science Improvement Program (COSIP). Their aim for example, is to develop diagnostic methods for determining critical areas of math or chemistry, etc., which many students have difficulty and design instruction to help students over these troublesome hurdles.

Under the direction of Dr. Michael Breitmeyer of biological engineering, the group includes Prof. Dale Oexmann of mathematics, Prof. Paul Mason of physics, and Dr. Dean Hill of chemistry. All are younger members of the faculty with the rank of associate professor.

Selective as Rose is in its admissions, many students do not enter school fully backgrounded to handle some of the math, physics or chemistry problems they will encounter their freshman year.

After the team had recognized the problem areas which most seriously affect the students' ability to grasp science and engineering concepts, it proceeded to write single concept programmed instruction on these problem areas.

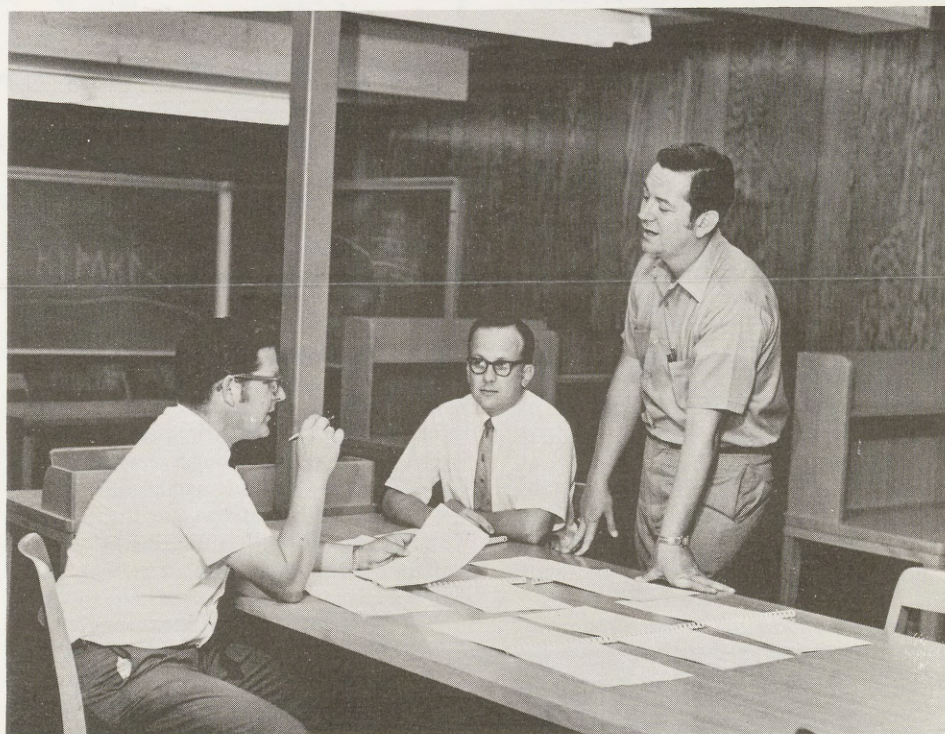
Programmed instruction was selected for many of the areas for three reasons: 1) the student receives instant reinforcement; 2) he can proceed at his own pace; and, 3) he can take full advantage of his most efficient periods for learning.

In addition to the team effort, individuals struck out on their own on research aimed at improving their particular classroom situation. Prof. Hill published a laboratory manual for freshman chemistry; Prof. Breitmeyer continued work on audio visual aids, and Prof. Oexmann worked on computer-animated

film loops on single concepts in mathematics which lend themselves well to this method of "getting the picture."

In a separate but COSIP-related project, Dr. Donald Chiang is continuing work on the self-education laboratory for mechanical and aerospace engineering, and has written programmed instruction text on the basics of analog computing.

When completed, the self-education laboratory will include laboratory experiments in more than a dozen areas and include an adequate film and film loop and videotape library on a variety of M.E. — Aero related instruction.



EDUCATION RESEARCH — Prof. Dale Oexmann (right) makes a point during an evaluation session of the COSIP group doing educational research at Rose Polytechnic over the summer. Other members of the team studying ways of improving the teaching of technical subjects were Dr. Dean Hill (left) and Prof. Paul Mason.

Dr. Logan Takes Name of Rose to Distant Places

Few college presidents carry the name of their school to more audiences than Dr. John A. Logan of Rose Polytechnic Institute.

As president of the Indiana Conference of Higher Education for 1970-71, he will draw the assignment as official spokesman for higher education in the state. A member of the governor's commission studying the role of privately supported education, he has been the man the press has come to when it wants straight answers about the status of independent schools such as Rose.

His calendar has not slacked over the summer; in fact, before school resumes in September Dr. Logan will have carried the name of Rose to a fifth continent within a span of less than eight months.

For two weeks in July he spent his "vacation" as a special consultant to the World Bank on an international development project in Uganda, Africa. The trip called for briefing and summarization sessions in Geneva, Switzerland.

In late August, he is scheduled to give a paper on sanitary engineering and urban development at the Twelfth International Congress of Sanitary Engineers in Caracas, Venezuela. Earlier this year, Dr. Logan keynoted a 16-nation conference on water resource development in Bangkok, Thailand.

An internationally-known leader in the field of environmental health engineering, Dr. Logan received the Uganda assignment through the World Health Organization which is working with the World Bank on evaluating proposed water supply and sewage facilities throughout Uganda from technical and economic points of view.

The consulting team, which consists of Dr. Logan, another engineer and an economist made initial studies of the projects during visits to Uganda cities of Brazzaville, Kinshasa, Entebbe and Nairobi last August.

Dr. Logan has served on a number of World Health Organization committees and consulting teams in recent years, and in 1968 edited the monograph for the organization's annual conference.

HOME COMING '70
OCT. 23-24

Rose Polytechnic 1970-71 Calendar

1970

Sept. 3-7
Sept. 8
Sept. 9
Sept. 10
Oct. 17
Oct. 22-24
Oct. 23-24
Nov. 20
Nov. 25

Thurs.-Mon.
Tuesday
Wednesday
Thursday
Saturday
Thurs.-Sat.
Fri.-Sat.
Friday
Wednesday

Freshman Orientation
Registration
Book Day
Classes begin
Midterm progress reports
High School Open House
Homecoming (no classes)
Final examinations begin
Fall Term ends.

WINTER TERM

Dec. 7
Dec. 8
Dec. 9
Dec. 22

Monday
Tuesday
Wednesday
Tuesday

Registration
Book Day
Classes begin
Christmas vacation begins

1971

Jan. 4
Jan. 23
Mar. 1
Mar. 6

Monday
Saturday
Monday
Saturday

Classes resume
Midterm progress reports
Final examinations begin
Winter Term Ends

SPRING TERM

1971

Mar. 15
Mar. 16
Apr. 17
Apr. 24
May 25
May 28

Monday
Tuesday
Saturday
Saturday
Tuesday
Friday

Registration
Classes begin
Midterm progress reports
Parents' Day
Final examinations begin
Commencement

Tightening of Economy Reflected In Recruitment of Class of 1970

Despite a tightening of the economy, which from the standpoint of college graduate recruiting is more serious than that of 1957-59, average starting salaries of Rose graduates continued to climb, according to the final report submitted by Paul B. Headdy, who retired as Director of Placement Aug. 31.

According to the report, company recruiters looked at far more men and screened them much more carefully than had been done during the previous 10 years. Consequently, the 200-man class of 1970 took a record 4,862 interviews and many more plant trips than ever before.

Generally speaking, the "specialized" man, unless he was outstanding, had difficulty being placed in the job of his choice as economy-minded management cut back to the bare necessities rather than adding what might be termed an "experiment."

Another indicator of the tight economy was the fact that 39 firms—or nearly 10 per cent—cancelled their campus visits, especially their trip to the campus scheduled in the spring. As expected, jobs were more numerous with

public utilities than with other type industries. Automotive and automotive-related industries seemed hardest hit, while chemical firms continue near normal employment.

This was reflected in the fact that chemical engineering graduates reported an average monthly salary of \$926. Electrical, mechanical and civil engineering followed by \$895, \$890 and \$876 average starting salaries, respectively. Although biological engineering had too few graduates entering employment to give a fair sampling, top money to the "bio" engineer was \$900 per month.

Physics, mathematics, chemistry and math-econ followed with \$883, \$859, \$845 and \$800 starting figures, respectively.

At the present time the outlook for placement of the class of 1971 appears about the same as it did a year ago. Some firms, especially aircraft, which have recruited regularly in the past, have not scheduled visits this fall.

Nevertheless, approximately 300 interviewing companies have indicated they will be on campus early this fall seeking the much sought after Rose man.

2nd Term Set For Occupancy Of New Building

Construction on the new classroom-laboratory building is progressing on schedule, with the start of the second quarter set as the target date for use of the classrooms in the 25,000 square foot structure located west of the Main Building.

While the classroom-lab construction is the most visible, it is by no means the only improvement being made on the Rose campus during the summer vacation.

The six large classrooms on the second floor of the south wing of the Main Building have been completely renovated. Drop ceilings have been installed with recessed lighting fixtures to increase illumination from 25 to 75 foot candles. The area will be fully carpeted and student stations will be replaced by two-man tables and individual chairs.

Improvement of laboratories throughout the Main Building continues, especially in the civil engineering and physics areas. Additional laboratory space will be gained by use of the mechanical-aerospace engineering and civil engineering areas of the annex east of the Main Building.

Thorne-Nalco Aid Fund Established at Rose

The Frank Thorne-Nalco Scholarship Fund has been established to assist deserving students at Rose Polytechnic Institute, according to Dr. John A. Logan, president.

Established in memory of the former Nalco Chemical Company executive, the fund was initiated by matching gifts of \$11,500 from the Frank H. Thorne family and the Nalco Foundation of Chicago. First awards from the new fund will be made this fall, according to school officials.

Thorne, a key executive with Nalco since its earliest days, was vice-chairman of the board of directors of Nalco and chairman of the board of Visco Products Company, a Nalco subsidiary, at the time of his death in 1956.

Thorne joined Chicago Chemical Company, a forerunner of Nalco, in 1924 and advanced through sales and management positions to vice president in 1937 and senior vice president in 1954.

Thorne's grandson, Frank H. Thorne, Palatine, Ill., is a senior at Rose.

**Change of Address?
Send it to Rose**



WHAT'S UNDER THE HOOD?—A group of "Operation Catapult" students marvel at the engine of the stock dragster built by the RPI Racing Association. Inset picture shows club faculty adviser Dr. Dean Hill explaining the club's work to Rose president Dr. John A. Logan.

Computer Tuned

Rose Racing Club Builds Dragster

A piece of masonite resembling the small information board Indy pit crews use to communicate with drivers during the famed 500-mile race hangs in the front hallway of the Main Building at Rose. This board serves as the chief communications link for members of the RPI Racing Association, one of the lesser publicized but more active campus groups.

Until recently the organization comprised of 70 students interested in auto racing and racing car design, etc., spent most of its time watching movies of major racing circuits and installing speed equipment members purchased through the club at reduced prices. This past winter the club took on a new dimension, and when summer rolled around the RPI Racing Association had a gold metal flake painted station wagon with a husky 600-horsepower engine to back up its race appearance.

Much of the new-found interest in the club was created by Dr. Dean Hill, professor of chemistry whose hobby is drag racing and serving as chief fuel checker for the National Hot Rod Association at its major meets, including the National Drags in Indianapolis each year.

But why a station wagon . . . why a 1963 Dodge station wagon with an automatic transmission?

The reasoning is simple: 1) this model has what Dr. Hill describes as an underrated engine (horsepower divided into shipping weight), and 2) the much-overlooked D Stock class is one which the club could compete favorably in with its limited investment.

Inasmuch as the 425-horsepower engineer was underrated, it was not difficult to get more than 200 additional H.P. out of the engine when altered to maximum tolerances.

With the help of Dr. Hill and donations of speed parts from specialists, the car rounded into shape in the late Spring. Although it was painted by a South Bend, Ind., shop which specializes in such work shortly after the third quarter started, it was not until mid-summer that the car made its first appearance at Rose—still not ready for competition.

The machine even has an international flavor—it's noisy, but computer designed and tuned exhaust system. Taking all parameters of the particular engine, Dr. Gordon Blair, professor of mechanical engineering at the University of Queens, Belfast, Ireland, and an acquaintance of Dr. Hill used a computer program he designed to give the club specifications for the most efficient exhaust system.

Off we go to the drags.

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ROSE ECHOES

Everybody's Back . . . Plus

Signs Point to Good Year for Engineers in Football

If rebuilding grid fortunes are as cyclical as Coach Bob Bergman's record indicates, this well could be the year of the Engineer.

Bergman, you will recall, came to Rose in 1968 after compiling an impressive 25-10-3 high school mark at Attica and Greencastle where football had been in the darkest part of the cellar for many years before he arrived on the scene. Rebuilding has not been an easy task at Rose, but things appear to be looking up for the 1970 season.

Some of the prime indicators are:

— Last year's predominately freshman ball club won the last three games of the season for the Engineers' second .500 or better season of the decade.

— Inasmuch as there was not a single senior on last year's club, Rose has to be the only college team in the nation with "everybody" returning.

— There are six seniors on the team (five were regulars last year) who all too well recall the 1-6-1 mark as freshmen and the agonizing 0-8 record during Coach Bergman's freshman year in college coaching two years ago.

— The 350-member freshman class includes

some fine football talent eager to push some veterans out of starting jobs.

Led by fourth-year running backs Roger Ward and Tom Merrill and sophomore quarterback Rick Manuszak, the biggest chores facing Engineer coaches appear to be that of filling the guard shots and providing more depth in the running game.

The Rick Manuszak to Ed Adams passing combination proved extremely explosive at Earlham and other places last season, and it would not be a surprise if the Engineers rely more on the aerial game this fall.

The offensive and defensive walls should not change drastically from last year, with seniors Dennis Smith (235), Dan Peelman (210), and Buzz Scharringhausen (205) leading experience a lineup which probably will include no fewer than six sophomores who held starting assignments last year. Among the younger veterans are tackles Jerry DeMeyer (252), and Mike McShane (215), guards Randy Foster (205), Mark Cane (205), Jerry Bertram (200), Mark Hollinger (200) and George Rodibaugh (198), center Dick Frushour (195) and ends Dan Moss (205), Dave Burgner (198), Woody Heller (195) and Joe Zumar (195).

Also returning are veteran linebackers Norm Kelin, Denny McCleary, Mark Gudorf and Brennan Banion and deep backs Steve Powell, Kevin Murphy, Ray Kominarek and Bill Randall.

BASKETBALL

Wed.	Nov. 18	MARIAN
Tues.	Dec. 1	at Florida Presbyterian
Thurs.	Dec. 3	at Florida Tech
Sat.	Dec. 5	at University of the South (Tenn.)
Sat.	Dec. 12	PURDUE-CALUMET
Mon.	Dec. 14	BALDWIN-WALLACE
Thurs.	Dec. 17	at Indiana Central
Fri.	Dec. 18	ILLINOIS COLLEGE
Tues.	Dec. 22	at Wright State
Tues.	Jan. 5	FRANKLIN
Fri.	Jan. 8	at Centre
Sat.	Jan. 9	at Transylvania
Tues.	Jan. 12	WABASH
Sat.	Jan. 16	at Earlham
	Jan. 22-23	ROSE POLY INVITATIONAL TOURNAMENT (McMurray, Pace, Centre, Rose)
Wed.	Jan. 27	DePAUW
Sat.	Jan. 30	ANDERSON
Tues.	Feb. 2	at Marian
Fri.	Feb. 5	PRINCIPIA
Fri.	Feb. 12	at Principia
Sat.	Feb. 13	at Washington U.
Tues.	Feb. 16	GREENVILLE
Fri.	Feb. 19	at Illinois College

FOOTBALL

Sept. 19	MANCHESTER
Sept. 26	at Concordia
Oct. 2	PRINCIPIA
Oct. 10	INDIANA CENTRAL
Oct. 17	at Hanover
Oct. 24	ILLINOIS COLLEGE
Oct. 31	at Iowa Wesleyan
Nov. 7	EARLHAM
Nov. 14	at Wilmington

CROSS COUNTRY

Saturday, Sept. 19	Wabash Hokem Karem
Friday, Sept. 25	at Marian
Tuesday, Sept. 29	at Wabash
Saturday, Oct. 3	EVANSVILLE
Tuesday, Oct. 6	FRANKLIN
Friday, Oct. 9	MARIAN
Friday, Oct. 16	at Hanover
Friday, Oct. 23	at Butler
Tuesday, Oct. 27	DePAUW
Friday, Oct. 30	Little State (Indianapolis)