

The Inquiring PHOTOGRAPHER

By FRANK GRANGER
The purpose of this column is to provide space for your questions and opinions on campus issues. We welcome the questions and will try to use those we feel have interest to our readers. Questions should be taken to the graphic arts building or mailed to the Inquiring Photographer, Chowan College, Box 34.

Question: The lunch line on Tuesdays and Thursdays is long and slow. Do you think students are justified in "line breaking?" What should be done or not done?

Where asked: McSweeney Hall

Jennie Summerlin, sophomore, Warsaw, N. C. "Well, I'll tell you the truth. I think here ought to be some wa in which students with classes should be able to eat early, but you can't do that because then everybody would do it. It's best to leave them as they are."



Tom Manning, sophomore, Teaneck, N. J. "If he opened he line early it might help. You couldn't have a special line because there wouldn't be any place to put it. It's hard to say. If they could arrange some way to do it, I think it would be all right, but I can't think of a way."



Tom Hoggard, sophomore, Hampton, Va. "I think they should open the line right after chapel. Line breaking shouldn't be done. I don't see how it could be stopped unless sa person with authority took ID numbers and that's sort of childish."



Rick Muzika, freshman, Durham, N. C. "I don't believe it's justified for the simple reason that it's not fair to the person who got there before them. As to what can be done? Give a class down or something? Isay it is the cafeteria's responsibility."



Carl Sell, freshman, Virginia Beach, Va. "I don't see very many people breaking in line. I eat late. I don't think it is any great problem."



Martha "Sam" Dodd, sophomore, Emporia, Va. "I think they should open the line right after chapel because those in 12:30 classes don't have time to eat. It's hard to say if they are justified, because those in 12:30 classes are rushed. Disciplinary measures are not being taken as they should be. The cafeteria is responsible for this."



Lorriane Brinkley, freshman, Norfolk, Va. "I don't think they are justified in line breaking because you can't do it on other days and other people want to eat just as bad. I really don't know what should be done except open the line early."



Bertie Ann Baggett, sophomore, Windsor, N. C. "I don't think they are justified in line breaking. They have no way of knowing if other persons have just as good reasons. Opening the line early would solve the problem I think. Speeding up he service would help. Call downs are being given, but I haven't seen any one breaking."



Don't brag on coffee - too risky

Maxwell House, which makes you-know-what, has completed a survey that shows coffee makes the difference between an idle, irritable day and a hard-working one to many housewives. It's hard to see how the poll could have come out different.
At the same time, we feel impelled to warn Maxwell House about flaunting its survey findings. If these claims get any substantial attention the Surgeon General is likely to turn up a report that caffeine, which is present in most coffees, contributes to abdominal cancer, Bright's disease, and ingrown nails.
Next thing you know, somebody will be trying to ban it from the breakfast table.—Asheville (N. C.) Citizen

Do you know what is available to you in science?

By PROFESSOR GEORGE HAZELTON
The Department of Science and Mathematics has been housed in Green Hall since September 1956. Almost all the mathematics courses have been taught in Marks Hall since its opening in 1965.

A discussion of the department's mathematics program has been given in another article in this paper. This article will be limited to the science area of the department. Green Hall was made possible by gift from Mr. and Mrs. Rufus J. Green in honor of Green's mother, Mrs. Mary Olivia Green, class of 1863. The building was designed for a total student body of 400.

When it opened in 1956, the college enrollment was 235. The department's enrollment in science was 117; 73 in biology, 40 in chemistry and four in physics.

In fall 1969 the college's enrollment was 1300. The department's enrollment in science was 617; 449 in biology, 134 in chemistry and 34 in physics.

Although the present building was certainly adequate in 1956, the five-fold increase in the science enrollment has put much strain on the building's capacity. An immediate physical evidence of this is the rundown appearance of the building's interior.

However, the lack of sufficient space to conduct classes, to properly store apparatus, and for preparation is our most pressing problem at this time. It is a credit to the faculty that they continue to perform with such excellence.

The proposed new Science building will, of course, solve this problem and the faculty is most hopeful that we will not have to continue in our present building for long.

The most modern and best equipped building cannot alone teach the student. (According to some recently expressed ideas, these items may account for a rather large percentage of the teaching effort!)

The students are most fortunate that the faculty of this department is, in general, strongly academically orientated and also dedicated to teaching.

The writer has had the opportunity to become acquainted with most of the two-year colleges in North Carolina and I think, quite objectively by the way, that our course offerings in science and mathematics are of the best quality.

The curricula offered by the department are many and varied. We offer good, strong basic courses in biology, chemistry, and physics. The course content of each is continuously under review and open to improvement.

Suggestions for improvement now under discussion by the faculty include a year of general biology rather than one term of botany and one of zoology, more specialized courses in biology, more use of modern teaching aids and modern lab apparatus and the introduction of new ideas in the method of teaching.

We offer two courses in physics. Physics 181-182 is an introductory course in college physics. It includes a study of mechanics, heat, sound, electricity, and magnetism, light, and modern physics.

Modern physics is defined by most people as physics after 1900—relativity, atomic fission and fusion, and quantum mechanics, topics which are most important to the student's understanding and appreciation of modern technological advances.

Physics 185-186 is a more thorough and rigorous introduction to physics than is offered in Physics 181-185. It is designed for engineers and other curricula needing this level of physics. The mathematical maturity of students is assumed to be of the calculus level.

This course tends to be of a more technical nature with more emphasis on problem solving.

Both courses carry three hours of lab work per week. Most of the lab problems are traditional but an effort is being made to introduce more realistic and meaningful labs.

Two of the more interesting lab exercises are one in which the student measures the magnetic field of a coil of wire in terms of the weight of a common piece of string, and the ratio of charge to mass of an electron.

It is most important that students gain the knowledge necessary to form intelligent opinions about underground nuclear explosions, appropriations for space travel, and the ratio of mega-tons to number of people

killed. It is hoped that Physics 181-182 will help the student gain this knowledge.

While the college does not offer a liberal arts physics course, Physics 181-182 does not require an overabundance of mathematical sophistication. Any student taking Math 103 should be able to do the math required in the course.

We teach a university-parallel general chemistry course. There is an attempt to see chemistry, the structure of matter and the changes it undergoes, as a group of related periodic concepts rather than completely unrelated facts to be memorized.

In the first semester atomic structure, bonding, gas laws, and stoichiometry are studied.

The three hour weekly laboratory gives students an opportunity to collect data and apply knowledge gained from the lecture sessions.

Experimental determinations include formula for a metallic chlorate, atomic weight of a metal in a metallic chlorate, specific gravity of a metal, and acid-base titrations.

In the second semester, discussions are centered around chemical equilibria and distortions thereof as predicted by LeChatelier's Principle.

LeChatelier's Principle is of such broad application that it is observed in situations such as changing the temperature of a chemical reaction, exceeding the legal speed limit to return to the dormitory before closing time, and hopping on one foot because the other is broken. A major portion of the second semester laboratory is qualitative analysis.

In organic chemistry pure memory is de-emphasized with emphasis shifted to understanding fundamental ideas which afford a basis for predicting what should happen in a system which one has not actually encountered.

Some of the fundamental ideas include bonding, stereo-chemistry and characteristic reactions of the various organic groups. Nuclear magnetic resonance, infrared and ultraviolet spectroscopy are studied rather vicariously.

The basic theory is discussed and students are allowed to interpret some prepared spectra. In the laboratory sections the student gains experience in synthesis of organic compounds and their derivatives.

Biology 101 is a one-semester course in general botany. It is recommended both for students who will specialize in botany or related sciences and for the larger number of students who will take botany as a required or elective part of a liberal arts curriculum.

A survey of the plant kingdom is given only in sufficient depth to give the student a good understanding of the scope and diversity of the plant life on earth. The major plant groups are illustrated by common representatives of the groups, with emphasis being placed on their structure, physiological processes, evolution, and heredity.

The biological importance of the plant groups as well as their environmental relationships are also considered. The class meets six hours per week, three of which are spent in the laboratory.

During the laboratory period students are acquainted with plant representatives and with important botanical principles.

Biology 102 considers molecular biology to be essential for the understanding of the subject. However, since most of our students enter a profession in which their primary contact is with the organism, emphasis is placed on a balanced treatment of structure, diversity of form, and functional anatomy.

Consideration is given to the unity of life and the adaptations of life to this planet in all its various environments.

Emphasis is directed toward appreciation and basic understanding of general principles and laws of the animal kingdom, starting with the one celled organism and progressing to the complex with emphasis on the phylogenetic approach.

During the laboratory periods representatives of the major phyla are studied, with emphasis on the anatomy and morphology of the animal. The frog is studied as the typical vertebrate in lab, and man is considered the representative vertebrate during lectures.

Biology 221 and 222, Human Anatomy and Human Physiology respectively, are taught basically for nursing students. How-

ever, other students may elect to take either or both of the courses.

Anatomy employs a systematic approach to gross anatomy at the organ level. The laboratory utilizes charts, models, preserved materials and fresh materials to illustrate the structure of man.

Topics discussed in Human Physiology include muscle activity, buffer mechanisms, gaseous exchange, respiration, properties of blood and circulation, enzyme activity, urine formation, nerve impulse transmission and endocrine activity.

Although these topics are discussed individually, their interaction and the resulting stability of the internal medium of the organism, homeostasis, are stressed throughout the course.

Apparatus such as the kymograph, vitalometer, sphygmomanometer, and Spectronic 20 colorimeter are used in the laboratory to observe principles of human physiology.

Biology 241, Microbiology, deals with organisms too small for the human eye to see. These are less than 0.01 mm. (0.004 inch) in diameter and includes both plants and animals that are this small or have a stage in their life history that is microscopic.

While the above definition includes all life, we do not cover that much, but give emphasis to the bacteria and other Thallophytes and the Protozoans that are important to man's welfare.

The morphology and physiology of microbes are stressed throughout the course in lecture and laboratory. Basic principles and techniques of culturing and isolating of species and straining methods are mastered.

Specific enzymes necessary to certain physiological activities are determined through the use of media containing carbohydrate and other nutrients separately in combinations.

The value of straining and the use of specific nutrients are necessary as aids in the identification of all microbes and especially in this true of bacteria.

The environment of bacteria (microbes) is as important as the environment of each of our cells is to our body. The effect of the degree of radiation, pH, temperature and antibiotics is determined since these affect the rate and the direction of growth and even the morphology of the organism.

Some emphasis is placed on microbial genetics (some bacteria reproduce sexually) through reading of material, and in the laboratory using specific species of fungi.

After the first few laboratory periods, students are given blocks of work and work at their own speed within scheduled deadlines as to dates of completion.

Each student works alone. One or more research papers written, 12 articles are read and reported on, and a laboratory notebook is turned in. The final grade is determined from both laboratory and lecture work, each counting the same amount.

Biology 241, potentially meets all requirements of a science course: interesting, challenging, open-end experimentation, demanding in both patience and time, and very satisfying as skills and knowledge are acquired.

In case the above frightens any student, it must be stated that very few F's (only two in five years according to the instructor) or D's have been received by students as grades. It is not rare for a whole class to earn any grade below a C.

Biology 241 is taken by students in science-related curricula. Botany 101 is a pre-requisite except for nurses who fulfill this science requirement by having completed anatomy and physiology.

I wish to thank the following professors who assisted me in the course description of their discipline: Mrs. P. Dewar, chemistry; James Dewar, human anatomy and physiology; J. P. Harris, Biology 102; Mrs. S. Bowers, Biology 101; Mrs. D. Faucette, microbiology.

Undertakers became morticians. Garbage collectors became sanitary engineers. Now some economic forecasters are calling themselves "economometricians." If past experience is any guide, the only thing that happens when people choose more flossy titles is that their prices go up. — Charles-ton (S. C.) News and Courier

And all because of 'The Beard'

By FRANK GRANGER
Joe had been at the drive-in with some friends when his father's secretary called and left the message for him to come to the office where his father worked.

"It's about my beard," Joe said to himself as he stepped into his car.

Ever since his mother died, Joe had become accustomed to seeing his father at the office. He would prefer not to see him at all than to go to that place. "It was just a business appointment for him."

It had to be about his beard. The beard that he had grown and shaped himself had become a symbol to him, a symbol of his pride and independence.

Now his father was going to get into it. "Well, let's see him try to make me shave," Joe spoke out loud as he roared into the heavy afternoon traffic. "What does he think he's going to do — whip me?"

The words sounded funny to Joe, a whipping! He hadn't had one of those in years. In fact he couldn't even remember his father ever having given him one. His father never took time to use physical force. He'd just fuss a lot and make threats which he never had time to carry out later.

It was his mother's job to do the whipping. And boy could she swing that amber brush! Well, that was a long time ago and now he was grown seventeen years old six-foot two and 180 pounds.

"Don't need nobody for nothing," he mused. What would his father try to do — cut off his allowance ground him take away his car? "I'll show him" he thought. "I'll move in with Bob and Hank over on the campus."

Then what could his father do?

He was already getting his meals at school and Bob said they had lots of room. The more he thought the better he liked the idea. No rules no extra work. Great, it would be just great. He could move his cot and clothes, be on his own in every respect.

Joe parked his car and walked into his father's office. "Hello, Mrs. Jenkins," he greeted the secretary nodding to the other office force.

"Hello, Joe," Mrs. Jenkins pointed to his father's office. "He'll see you now."

Joe walked into the well-lighted room and closed the door. All eyes were on him. He used to want to explore among the books and cabinets, but now the idea of a prolonged visit was revolting to him. To be summoned to the office for a lecture was worse than the whippings had been when he was a child.

His father looked up and motioned for him to sit down. "How'd school go today, Joe?" he asked.

"Okay, I guess," Joe answered.

His father looked at him for a second and then said, "Joe, I'll get right to the point. Ever since your mother died you have changed. I know it has been hard. It's been hard on me, too, but that's no reason for your becoming a Hippie."

"I am not a Hippie," Joe said sharply, waiting for his father's slow temper to rise.

"Look, Joe. You and I don't see eye to eye, I know, and I don't expect you to agree with me all the time. But that beard is a disgrace, and you should be ashamed."

"I am not a Hippie, and I am not ashamed of myself," Joe said more sharply still.

"Joe I don't have time to debate the question," his father said a little more angered than before. "Here is a check for \$50. As soon as you shave, the money's yours. And I've never known you to turn down money." He sat at the desk waiting for Joe's reaction.

Joe picked the check off the corner of the desk where his father had placed it. Slowly like a great animal that had been shot he raised the check to his face. Looking at the neatly typed business check, he studied the words and his father's handwritten signature.

Joe let the check drop slowly to the floor. Unable to speak he shook his head and raced out the door, slamming it as he left. He ran down to the wash room and flung open the door, causing the backstop to bend out of the wall with a sharp crack.

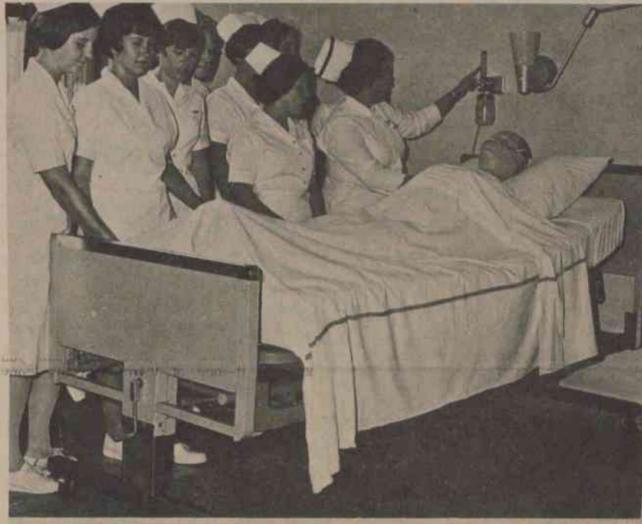
Grabbing a broom handle he swung with all his strength at the window. The thick glass broke in large ragged chunks. Seizing a razor sharp piece he scraped at his face with violent force. Large bloody chunks of hair fell into the sink. He seized and cut until he could no longer recognize the face that stared at him from the mirror. Blood dripped on the sink and floor as he dropped the glass.

Once again his movement was of an ailing animal of the jungle. Leaning against the wall, he grabbed his head in his hands and cried.



Student nurses get an early start

Heading for the classroom at the Roanoke Chowan Hospital in Ahoskie are several of Chowan's student nurses. They will receive classroom instruction from Mrs. Sarah B. Tankard and Mrs. Wanda Edwards of Chowan's nursing department, who also supervise the clinical experience of the girls in the hospital. The student nurses identified above are Sydney Graves, right, followed by Joyce Ellis, Betty Sowers and Melba Fowler.



'Mrs. Chase' is the center attraction

Chowan's dummy, Mrs. Chase, is the object of attention of this group of student nurses receiving instruction from Mrs. Sarah B. Tankard, professor of nursing. The scene is one of the classrooms at Roanoke Chowan Hospital in Ahoskie.

Student sampling indicates liking for Shorb Brothers Chapel program

By FRANK GRANGER
A fresh approach was taken last Tuesday to the regular chapel assembly. The Shorb Brothers of Washington, D. C. provided for both assemblies a mixture of songs of various appeal, but with one common spiritual message.

The Shorb foursome (three are brothers) are often called the "Ambassadors of Sacred Song." They perform over 325 concert dates a year as well as being owners of Praise Record Co. of Silver Spring, Md.

Their first song recorded was "Teenager" which they sang Tuesday. Others included "The Impossible Dream."

Rainy day service added at library

Whitaker Library now has an umbrella check-in service for those rainy days coming up. Instead of leaving your umbrella unattended in the lobby, it will now be possible to have it kept safely behind the circulation desk.

You are asked to shake your umbrella as dry as possible, close it, and bring it to the circulation desk. An identification system of numbered tags has been worked out to insure easy identification of property.

When an umbrella is checked in it will be tagged with a number. You will receive a corresponding number tag which you must give to the desk attendant when you wish to retrieve your umbrella.

This system is expected to be quick, efficient, and safe, so a rainy night need no longer be a deterrent to study or research.

This new service is the direct result of student suggestions concerning the need Librarians are happy to listen to any suggestions from students and these often result in some immediate direct action.

For instance, the library now has books by Rod McKuen and Harold Robbins due to student suggestions. So to all students, thank you for your cooperation, and we hope our newest service will be a real benefit.

'Rings and Things' was popular at coffee-house

On campus this week the "Rings and Things," a coffee-house group, performed in the student union Monday through Thursday night.

This coffeehouse entertainment was sponsored by the SGA. There was no admission charge and guests were allowed to wander in during their leisure time.

This group is a new one of many sounds and vocal images. They expose a tremendous variety of material from blues, love, pop-rock and French-Canadian folk.

They have previously performed at the Bitter End in New York City, Cate Lena in Saratoga Springs, New Penelope, Yellow Door and ExDo '67 in Montreal.

The members are Canadian, but each has a different nationality — Welsh, Irish, Scottish and Negro-Indian. Their appeal is universal whether they are singing in English or French.