Office Releases Student Ratings

Scholastic standings released by the Office of the Registrar indicate improved scholarship for the fall semester of 1935-1936 as compared to the spring semester of 1935-1936. Organizations showing an improved scholastic standing were the undergraduate student body, the classes and the various departments, while social and honorary fraternities for the most part suffered losses in scholarship.

Seniors Highest

The average of the student body, a total of 750 students, is 1.62.

The average of the various classes are as follows:

Senior Class	1.96
Junior Class	1.69
Sophomore Class	1.57
Freshman Class	1.39

Frank D. Cotterman heads the senior class with an average of 2.96, William B. Graupner heads the juniors with 2.93, William R. Marshall heads the sophomores with 2.91, and freshmen George J. Derrig outranks all other class leaders with a perfect 3.00.

In computing the departmental averages, freshman students are not included:

Engineering Science	2.08
Fire Protection Engineering	1.92
Civil Engineering	1.78
Electrical Engineering	1.74
Chemical Engineering	1.71
Architecture	1.64
Mechanical Engineering	1.57

T. X. Beats Rho Delts

Among the scholastic honorory fraternities, Tau Beta Pi heads the list.

Tau Beta Pi	2.58
Chi Epsilon	2.42
Eta Kappa Nu	2.42
Phi Lambda Upsilon	2.41
Salamander	2.36
Pi Tau Sigma	2.19

Of the non-scholastic honor organizations, Pi Nu Epsilon has an average of 1.84, and Sphinx honor society has an average of 2.23.

The scholastic average of the professional fraternities is:

Scarab	1.95
Alpha Chi Sigma	2.11

In the competition for the loving cup awarded annually to the social fraternities, a slim margin of 0.004 separates the two highest—Theta Xi remains possessor of the cup, won last semester, with an average of 1.871 and Rho Delta Rho is again second with an average of 1.867. The averages of the other social fraternities are as follows:

Sigma Alpha Mu	1.83
Pi Kappa Phi	1.63
Triangle	1.61
Delta Tau Delta	1.54
Phi Kappa Sigma	1.41
Phi Pi Phi	1.37

Fraternity Average Is 1.53

The fraternities that own or rent their own chapter houses—Phi Kappa Sigma, Delta Tau Delta, Phi Pi Phi, and Pi Kappa Phi—have a scholastic average of 1.53 as compared to the average of all students of 1.62.

In compiling the scholastic averages the following numerical values were given to the letter grades: A is 3 points B-2, C-1, D-0, and E-0. Grades in physical education were not included.

Class of '39 Sponsors Only Summer Affair

Continuing their social affairs on into the summer recess the class of '39 introduced a new factor to their fellow classmates in regards to class activities. On Friday, July 17th, sixty members of the class together with their girl friends, boarded the S. S. Roosevelt at the Michigan Avenue bridge and sailed on a two and a half hour moonlight cruise along the lake front. The party held reservations on the Lido deck and were entertained by the many attractions and scenes about the boat. Music was furnished by the ship's dance orchestra.

The committee, in charge of bid sales and arrangements consisted of B. G. Anderson, E. C. Mitchell, I. Footlik, and R. W. Starmann. Sales were handled by post card correspondence. The turnout was sufficient to balance the expenses.

NEW PROFS—

(*Continued from page* 1)

Dr. J. A. Schaad and Dr. R. H. Manley have both received appointments in the chemistry department. Dr. Schaad received his Ph.D. from the University of Illinois and will be an instructor in general chemistry, while Dr. Manley, having received his high school training at Senn and his Ph.D. from the State University of Iowa, will be an instructor in general chemistry and qualitative analysis. Otto Zmeskal, a graduate of Armour in '36, will be an instructor in metallurgy.

In the fire protection department, Mr. J. T. Sorensen, who received his B.S. in fire protection engineering at Armour Tech in June, 1933, will replace Mr. H. O. Sneidker as instructor of fire insurance. Mr. W. J. McLarney who attended the University of Iowa and received his M.A. from Columbia, will be an instructor in mechanical engineering.

Dr. J. G. Potter, who taught mathematics last year, will also teach physics this year. He was formerly a physicist at the Bureau of Standards. A course in building construction will be given by W. N. Setterberg to junior civils. Mr. Setterberg graduated from Armour Institute in 1929 and is a registered architect in the state of Illinois. He also will be assistant registrar.

Miss R. L. Verwey, the assistant librarian who was on leave of absence last year, has resigned, and Miss E. L. Chesire, who assisted last year, will remain with the library staff.

Student Surveyors Improve Civil Camp

In a program in line with the Institute's, improvements and changes were made at Camp Armour, civil surveying camp. Summer camp is located on the shores of Trout Lake, Vilas County, in northern Wisconsin. Led by Prof. J. C. Penn and S. M. Spears, twenty-nine sophomore and junior civils gained what to many was their first bit of practical experience. When camp opened in the latter part of June, a new arrangement of tents greeted the students as the somewhat helter-skelter order of tents gave way to an almost military horse-shoe formation.

Build Sixty Foot Pier

A pier some sixty feet long, donated by the State House, was assembled soon after camp convened. The pier, though not jig-sawed together according to the numbered pieces, served its purpose well, extending out into the deeper water and serving as an anchorage for the camp boats.

Utilizing some tall, upturned spruce, a forty-five foot flag pole was constructed and set in place before the mess hall. Standing not far from the water's edge on top of a small bluff, the flagpole, the proud bearer of Old Glory and the flag of A.I.T., can be seen from practically any part of the lake. That the spruce was cut, hewn, and trimmed entirely by the students themselves enhances the flagpole in their estimation.

Leave Class Gift

Continuing the principle renewed by last year's class, a novelty in the form of a four and one-half foot fireside bench was made as a memo of the class of '36. Carved in its inlaid Masonite top are the names of the students and professors.

When camp closed at the end of July, the improvements continued. With a nucleus of some eight men, under the direction of Professors Penn and Spears, a wooden shack large enough to house four men was built on the hill top facing the lake. The eventual plan is to replace the tents by the more permanent and durable wooden houses.

Take Many Pictures

Though a far cry from city facilities, sanitary conditions were improved by the erection of a new—no slivers—six-man house.

There is no doubt that this last summer at camp was an unusually productive one. In addition, it was an unusually photographed one, as moving pictures of camp life were made by Mr. Spears.

Assisting the professors in the work of guiding and instructing the students were P. L. G. Moore and H. Manke, who are now senior civils.

GOVERNMENT WILL ASSIST STUDENTS THROUGH N. Y. A.

Set Limit on Hours and Wages

Under the provision of the National Youth Administration for Federal College Student Aid, students will be enabled to work during the coming scholastic year on projects that are beneficial to the school. Students desiring such work may obtain applications from Mr. W. N. Setterberg, placement director.

Ninety-two jobs are obtainable, according to the ruling of the N.Y.A., which allows funds to pay up to twelve percent of the student enrollment of October, 1934, providing those students were carrying three-fourths of the normal curriculum.

No Hazardous Work

The yearly allotment for undergraduates is $12,420 which makes $4,140 available for the first three months period based on $1,380 per month. Graduate students have an allotment of $270 for nine months or $30 a month.

Students will work at school and at the Illinois State Employment Office. The work at school will be of a nature that is not required for the regular operation of the Institute. No work of hazardous nature is to be done and it will be of a practical and useful nature.

Limits Set On Hours

The selection of students for this work is to be based on four conditions prescribed by the N.Y.A. These conditions are: 1. Need of such aid; 2. Character and ability to do college work; 3. Students must be full-time resident students carrying at least three-fourths of the normal curriculum. Students at night school are eligible if they carry at least three-fourths of the full curriculum normally carried by regular day students. 4. Students' age must be between 16 and 25 years.

According to the N.Y.A., students may work a maximum of 30 hours in a given week—8 hours in a given day and shall be paid on an hourly basis at the hourly rate commonly paid by the institution—forty cents, at Armour.

POULTER—

(*Continued from page* 1)

sities and in Canada in 1927 before various scientific gatherings, and quite extensively before general audiences in reference to the Second Byrd Antarctic Expedition. His main achievements are his research work and his organization of the scientific work of the Byrd Antarctic Expedition.

Constructed Equipment

His research work lies in the field of the electrical, chemical, and optical effects of extremely high pressures. To carry on this work he had to design and construct all of the equipment used. He has also done much research in the fields of Antarctic meteor and auroral phenoma, geophysics, glaciology, seismology, terrestrial magnetism, and organic chemistry. He carried out his research work while at the University of Iowa in 1931, while with the Arizona Meteor Expedition in 1932, while having a Guggenheim Fellowship in 1933-34, and while second in command of the Second Bryd Antarctic Expedition 1935-36.

Organized Staff

The scientific research of the Byrd Expedition, which Dr. Poulter organized, covered twenty-two branches of science and employed a staff of twenty men. Not only did Dr. Poulter organize the work of the scientific staff, but he also secured donations to the expedition of more than seventy thousand dollars worth of scientific material and equipment. In Antartica, a land the size of the United States and Mexico, Dr. Poulter and his staff collected samples and specimens that will require three to five years of laboratory and research work for classification. A new species of fish and many new bacteria, and mosses were discovered as well as many mineral and coal deposits. In one mountain range twenty veins of coal each over six feet thick were found.

Chemical Fraternity Holds Yachting Trip

A yachting party was the chief feature of the summer program for Alpha Chi Sigma professional chemical fraternity. The yacht "Jackellen" was chartered for August 30; thirteen members of the fraternity and their friends enjoyed an afternoon of sailing, although no report was given as to who got seasick. Later the group went to the home of Howard Milleville for a radio dance and refreshments.

New quarters have also been given the Armour chapter because of the general rearrangement of Chapin Hall. The furniture and equipment have already been moved to the new suite on 33rd street, while plans are being made to complete remodeling and decoration at an early date.

REMODELING—

(*Continued from page* 1)

room adjacent to Science Hall has been converted into a physics storeroom.

Besides the actual remodeling the physics department benefited by the purchase of new equipment which includes a large demonstration ammeter and voltmeter, a dissectable motor generator, and new gyroscopic equipment. Equipment has also been purchased for experiments in light electronics, and heat.

The freshman drawing room on the fifth floor, Main, nas been cleaned, painted and varnished. Display and show cases have been installed to house student drawings and models.

Clean Library

In the library a thorough cleaning took place. Walls were washed and calcimined, and better accommodations were made for the library books.

As a part of the remodeling and rehabilitating program, the coal lab at 33rd and Dearborn Streets was installed. The first floor rooms were completely remodeled and redecorated and the floors scraped and stained. The rear porch was demolished and will be replaced by a steel stairway.

The men's lavatory in the Mission Building is being completely modernized. The fixtures have been completely removed and are being replaced with modern ones. A modernistic scheme will predominate; including indirect lighting and a suspended celotex ceiling.

Improve Grounds

The school grounds have also been improved. Lawns have been made and trees planted. More landscaping work will be done as the semester progresses.

In all some $12,000 has been spent to improve Armour buildings. Equipment valued at $5,000 was installed in the coal lab and $6,000 worth of equipment in the chem labs.

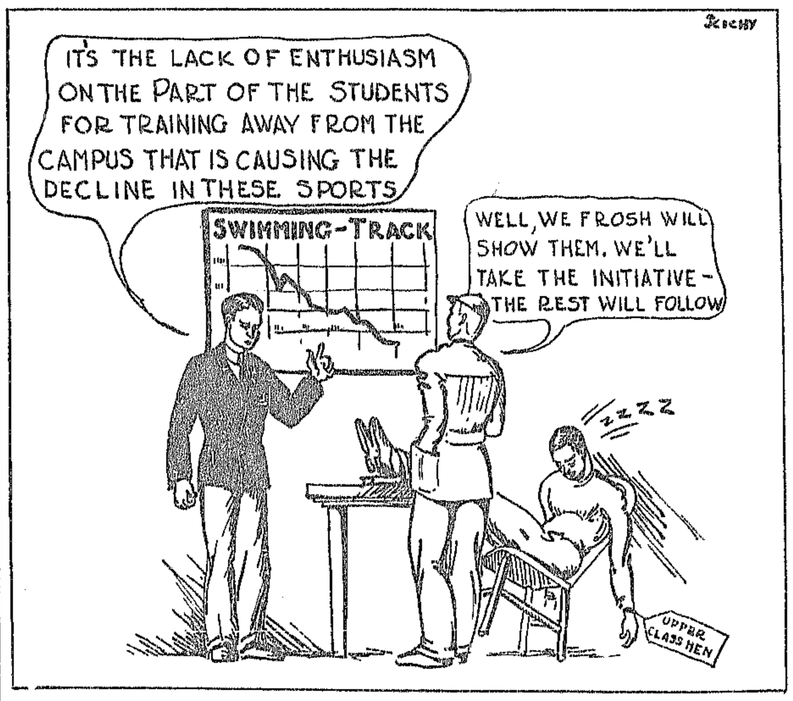
J. Bobhill and P. Cump Win Drawing Awards

Two Armour students, J. A. Bobhill and P. W. Cump, Jr., were awarded first places in the National Drawing Competition sponsored by the drawing section of S.P.E.E. at its annual meeting which took place at the University of Wisconsin last June.

In this competition Armour was the only school which received two firsts. Each college or university submitted only freshman drawings. Cump's work was judged on pencil drawing, orthographic projection, and pencil tracing. Bobhill's drawing was judged on the same points with the addition of dimensioning. The men judging this contest were T. T. Aakhus, University of Nebraska; A. S. Levens, University of Minnesota; and the chairman, G. M. Phelps, Rensselaer Polytechnic Institute.

At the three day session which took place just before the annual meeting of the S.P.E.E. three faculty members, instructors in drawing at Armour, were present: C. E. Hammett, W. H. Seegrist, and C. R. Swineford. Mr. Seegrist presented a short paper on "The Type of Training in Freshman Graphics Important to Progress in Engineering Education". Mr. C. E. Hammett read a paper on "Present Day Needs in the Freshman Course in Descriptive Geometry".

LEAD THE WAY, FRESHMEN!



A SPORTS EDITORIAL

School again! For the incoming freshmen, new acquaintances and new experiences; for the upper classman, the renewal of friendships and the persuance of a well-known routine. Into the minds of both come thoughts of school activities, sports, tournies, and the like.

The call for wrestling candidates sees a large turnout in the gym. It is true that some students show up just out of curiosity and so this group is trimmed down; but a sizeable squad remains to bolster the season's mat hopes. Basketball sees an equally large gathering with many aspirants for cage honors on hand. These sports have a record of success at Armour, and the main reason for this is the wealth of material from which these teams are chosen.

It is only when swimming and indoor track meetings are announced that this Techawk spirit suffers a considerable depression. Turnouts are poor, competitive spirit is at a low ebb, and hence the showing of these teams is not all it might be.

The sadness of this situation cannot be overstressed. It seems hard to believe that the spirited collegian who is willing to "do or die for dear old Armour" in wrestling or basketball is too indolent to travel to the University of Chicago for track or tank practice. With a wonderful athletic plant at our disposal it seems a shame to waste the opportunity to lend one's talents to the school simply because of the additional effort involved in making the trip.

It is unfortunate, of course, that Armour cannot provide these facilities on the campus, but this should not deter those with enough school spirit to surmount the difficulty. This is a challenge! What are you going to do about it?

RESEARCH—

(*Continued from page* 1)

gaseous by-products of little value, with the hope of converting them into gasoline.

Study Stokers in Ice Lab

In the refrigeration laboratory a domestic stoker research project has been studied since last May under the direction of W. A. Pearl. Mr. Pearl and three student associates have experimented with and made many improvements on coal stokers burning from twenty to ninety pounds of coal per hour for use in small homes. At the present time several stokers that contain all the new improvements are being given their final tests.

Coal Research Started

A coal research project has been started under the directorship of Dr. R. D. Snow in new laboratories of the Research Foundation in the building on the southwest corner of 33rd and Dearborn streets. The coal research project is to continue for at least one year and will make an extensive study of Indiana and Illinois coal. These states have the largest reserves of bituminous coal in the United States.

An attempt will be made to improve the combustion properties of the coal by mechanical cleaning. Dedusting and washing processes will be experimented with. A complete investigation will be made of methods to decrease the products of combustion which are mostly ash flue dust and sulphur dioxide. It is hoped that perhaps 25%-30% of the impurities can be removed at the mines by mechanical cleaning.

Following the study of the washability of coal, work will be done on colloidal suspension of pulverized coal in fuel oils. This will utilize the fine coal dust now wasted at the mines and provide a convenient method for transporting pulverized coal.

Investigate Coal for Stokers

Later, the optimum size of coal for use in mechanical stokers will be investigated in an attempt to reduce the large variety of sizes of coal now on the market. Working with Dr. Snow on the coal project will be two graduate students and two undergraduate students.

The stoker research project, coal research, and Universal Oil research projects are forerunners of an extensive program being conducted by the Research Foundation which was formed on April 3, 1936, by the Board of Trustees of Armour Institute.

To Aid Scientific Investigation

Though not the largest research foundation, the Armour Foundation is perhaps the largest engineering research group. The project was organized to "promote, encourage, maintain and aid scientific investigation and research in affiliation with ...the faculty staff, alumni, and students...and to provide or assist in providing the equipment, machinery and means by which their scientific studies, discoveries, inventions, and processes may be developed applied and protected..."

The following are the officers of the Research Foundation: Willard E. Hotchkiss president; Charles W. Hills, Jr., vice president; Robert B. Harper, treasurer; Homer H. Cooper, secretary; James D. Cunningham, Paul H. Davis, and Alfred L. Eustice, members of the board of directors.