

## Concise History of the Department of Mathematical Sciences at the University of Cincinnati

Prior to their unification in the academic year 1955-1956, there were three separate departments of mathematics at the University of Cincinnati. The College of Engineering had its own Department of Mathematics and Mechanics. It was a large highly-organized department that taught all of the undergraduate mathematics, mechanics, and related courses for students in the College of Engineering. Professor Louis Brand served as the head of that department from 1931 until his mandatory retirement at age 70 in 1956. Before being awarded the Ph.D. degree in mathematics at Harvard University in 1919 under the direction of Maxime Bôcher, Professor Brand had earned bachelor degrees in Chemical Engineering and Electrical Engineering. The Graduate School Department of Mathematics owes its development from 1900 through 1937 to Professor Harris Hancock who earned his Ph.D. on elliptic functions at the University of Berlin in 1894 under the direction of Lazarus Fuchs and Hermann Amandus Schwarz. He also earned the degree D.Sc. at the Sorbonne in 1901 under the direction of Gaston Darboux on the subject of algebraic number theory. When Professor Hancock retired in 1937, Professor Brand became head of the Graduate Department of Mathematics and served in that capacity until his own retirement in 1956. The web address

<http://projecteuclid.org/euclid.bams/1183506293>

provides information about viewpoints held by Professor Hancock. The third Department of Mathematics before 1955 was structured for the College of Arts and Sciences. In 1955, its head was Professor Gaylord Merriman and the other members were Isaac Albert Barnett, H. David Lipsich, Miss Jean Winston, and an instructor. Professors Merriman and Lipsich earned their Ph.D. degrees at the University of Cincinnati under the respective directions of Harris Hancock in 1926 and Otto Szasz in 1949. Professor Barnett earned his Ph.D. at the University of Chicago in 1918 under the direction of Gilbert Bliss. In 1955 and later, Professor Arno Jaeger and various distinguished research professors from Germany considered themselves to be members of only the Graduate Department due to their emphasis on research in pure mathematics.

During the academic year 1955-1956, the three departments were joined to become the unified Department of Mathematics with Professor Brand as its head. The plan succeeded in transferring overall leadership from Louis Brand to Gaylord Merriman beginning with the academic year 1956-1957, but separate divisions remained with inflexibility caused by the special calendar of the College of Engineering designed to accommodate the work sections of its students in the cooperative system of education created in 1906 by Dean Herman Schneider. The launch of Sputnik in 1957 and the consequent increase in the perceived importance by the general public of engineering and mathematics contributed to rapidly increasing class sizes. After the quarter system was adopted by all the colleges at the University of Cincinnati during the 1963-1964 academic year, there was no longer any need to accommodate teaching assignments to the two different calendars. At that time, the course requirements for graduate degrees emphasized pure mathematics and motivated the teachers of mechanics and related applied courses to withdraw and reorganize themselves in the College of Engineering. All of the

remaining faculty were members of the College of Arts and Sciences and had primary interests in pure mathematics. The calculus classes for engineering students were now a major part of their responsibilities for teaching all of the mathematics at the main campus of the University of Cincinnati. By 1970, every member of the department was declared to be a member of the Graduate School and expected to do serious research in mathematics. That emphasis on research prevailed into recent years but has gradually changed as economic conditions have forced administrators to make various additions and alterations to the department. Now, there is increasing activity in applied mathematics. In particular, the subjects of statistics and probability play important roles. Also, the quarter system has been abandoned for a change to the semester calendar beginning with the academic year 2012-2013. Numerous service courses are taught by adjuncts and dedicated teachers not expected to focus on research. One may click [http://www.artsci.uc.edu/departments/math/fac\\_staff.html](http://www.artsci.uc.edu/departments/math/fac_staff.html) to access the web page of the department.