

CHANLER, Josephine H. April 7, 1906–December 23, 1992.

WESTERN KENTUCKY STATE NORMAL SCHOOL AND TEACHERS COLLEGE (BA 1927),
UNIVERSITY OF ILLINOIS (MA 1930, PhD 1933).

Josephine Hughes Chanler was the only child of Louisa Castle (Hughes) (1869–1948) and James H. Chanler. Although she was born in St. Louis, she and her mother were there only briefly, staying in a friend's apartment while her father was away looking for timber for a lumber company. A few weeks after Josephine's birth, she and her mother returned to Bowling Green, Kentucky, where her mother's family lived. Her father was away from the family after that time, although her parents corresponded until about 1918.

Josephine Chanler's mother had begun teaching at age eighteen and had attended, but not received a degree from, Pleasant J. Potter College, a college for women with preparatory and degree programs in Bowling Green that was chartered in 1890. Her mother taught in grade school and then in high school in nearby Franklin, Kentucky, so Josephine and her mother typically lived in Franklin in the winters and in Bowling Green in the summers.

Josephine Chanler contracted polio as a child and had surgery at various times in her life as a consequence. She attended schools in both Franklin and Bowling Green. She noted later that she started high school at age eleven in Franklin. At about this time her mother was teaching history in a small college there, but was unable to return to her job after an illness and surgery. Josephine Chanler then attended a half year of high school in Bowling Green, before she and her mother went to Jacksonville, Florida, to stay with family; she graduated in 1923, at age seventeen, from Duval High School in Jacksonville.

Chanler credited her grandfather with starting to teach her mathematics at an early age and her mother with encouraging her to go to college and later to do graduate work. Thus, after her high school education they returned to Bowling Green where she entered Western Kentucky State Normal School and Teachers College (now Western Kentucky University). The college had awarded its first degree (baccalaureate) in 1924. Chanler noted later that her tuition at Western Kentucky was ten dollars a semester. She graduated in 1927 and that summer published a poem in a journal of the Kentucky Folk-Lore Society. Immediately after her graduation, she taught mathematics for two years in the high school in Bowling Green.

Chanler's mother mortgaged the house she had inherited in Bowling Green, and they moved to Illinois in 1929 so Josephine Chanler could begin her graduate work at the University of Illinois. She was unable to get an assistantship the first year since her undergraduate degree was not from a fully accredited school. However, she earned her master's degree in 1930 with a thesis written under the direction of [Bessie Irving Miller](#), who had earned her PhD at Johns Hopkins University in 1914, one of the first two doctoral students of Arthur B. Coble. Coble, who was to become Chanler's doctoral dissertation advisor, had come to Illinois as professor in 1918, while Miller had come as an instructor in 1928 after heading the mathematics department at Rockford College in Illinois. Miller died suddenly a few months after Chanler received her master's degree. Chanler remained at Illinois and was a fellow in mathematics 1930–31 and then an assistant in mathematics while finishing the work for her doctorate in 1933 with a minor in physics. In the six years after she received her PhD, Chanler published five papers in algebraic geometry.

Chanler remained at Illinois for the rest of her career, although she had an opportunity to take a position as assistant professor at a women's college in New England in the mid-1930s. She was assistant until 1937, instructor 1937–39, associate 1939–45, assistant professor 1945–61, and associate professor 1961–71. When Coble was on leave, Chanler was the dissertation director of one doctoral student, Franz E. Hohn, who received his PhD in algebraic geometry in 1941. Chanler was described by a former colleague, P. W. Ketchum, in 1983 as a “very fine teacher.” He also noted that she had many “subadministrative” jobs in the department.

In the summers during World War II, Chanler taught in programs for servicemen. During the summers of 1959 through 1970 she was an instructor at National Science Foundation institutes for high school teachers at Saint Louis University. In 1968 she was among four University of Illinois faculty members to record a memorial tribute to her advisor and colleague, Arthur Byron Coble. The tribute was reproduced in the *Bulletin* of the AMS in 1970 (76:693–94).

Josephine Chanler and her mother lived together until her mother's death in 1948. They shared an apartment for a year with [Echo Pepper](#) after Pepper's apartment mate, Bessie I. Miller, died. Pepper had joined the faculty at the University of Illinois in 1928 as an instructor. [Beulah Armstrong](#), who had earned her PhD at Illinois twelve years before Chanler, was Chanler's office mate for twenty years. After the death of Chanler's mother, Armstrong, who loved to drive, took Chanler on trips nearly every summer; they camped in the West and went to various summer mathematics meetings. [Olive C. Hazlett](#) was also a colleague for several years.

Chanler was a staunch Democrat and was a member of Toastmasters International. Her religious interests were serious and eclectic; in about 1940 she listed her religion as Presbyterian; in a 1983 conversation with the author and Uta C. Merzbach, she described herself as “a Southern Presbyterian–Calvinist–Catholic with leanings toward Judaism and Islam and a very high regard for Buddhism, Mormons, and some Hindu gods.” An obituary noted that she was a member of St. Mary Catholic Church.

Chanler maintained an apartment in Champaign for many years after her retirement. There she kept in touch with numerous former students and tutored without charge countless students in mathematics. She was in a health care facility for about five years before her death in Urbana at age eighty-six in 1992. She is buried in Mount Hope Cemetery in Urbana.

Organizational affiliations: AMS, MAA, NCTM, Sigma Delta Epsilon, AAUP, Phi Beta Kappa, Sigma Xi, Pi Mu Epsilon.

Thesis and dissertation:

1930 Polar reciprocation with respect to conics [and quartics]. MA thesis, University of Illinois, directed by Bessie Irving Miller. (Title based on Chanler's recollection.)

1933 Poristic double binary forms. PhD dissertation, University of Illinois, directed by Arthur Byron Coble. Printed version, 1934, Baltimore, MD, reprinted from *Amer. J. Math.* 56:529–46.

Publications:

1927 The spirit of the cross. *Kentucky Folk-Lore and Poetry Mag.* 2 no. 2.

1934 Poristic double binary forms. *Amer. J. Math.* 56:529–46. Published version of PhD dissertation. Reviews: *JFM* 60.0076.03 (R. Weitzenböck); *Zbl* 010.12605 (E. G. Togliatti).

1935 with A. B. Coble. The geometry of the Weddle manifold W_p . *Amer. J. Math.* 57:183–218. Reviews: *JFM* 61.0712.03 (E. A. Weiss); *Zbl* 011.26904 (E. G. Togliatti).

1937 The involution curve determined from a special pencil of n -ics. *Trans. Amer. Math. Soc.* 42:1–15. Reviews: *JFM* 63.0636.03 (E. A. Weiss); *Zbl* 017.03003 (E. G. Togliatti). Presented by title to the AMS, Durham, NC, 31 Dec 1936; abstract: *Bull. Amer. Math. Soc.* 43 (1, pt. 1): 40–41 #81.

1938 with R. M. Thrall. Ternary trilinear forms in the field of complex numbers. *Duke Math. J.* 4:678–90. Reviews: *JFM* 64.0052.01 (R. Weitzenböck); *Zbl* 020.06105 (B. L. van der Waerden). Presented by title to the AMS, State College, PA, 10 Sep 1937; abstract: *Bull. Amer. Math. Soc.* 43:626 #362.

1939 The invariant theory of the ternary trilinear form. *Duke Math. J.* 5:552–66. Reviews: *JFM* 65.0665.03 (R. Weitzenböck); *MR* 1,35e (H. W. Turnbull); *Zbl* 022.07505 (E. A. Weiss).

1964 Review of *Modern Mathematics for the Engineer*, ed. E. F. Beckenbach. *Pi Mu Epsilon J.* 4:22.

1969 Review of *Modern Projective Geometry*, by R. J. Bumcrot. *Amer. Math. Monthly* 76:1168–69.

Abstract not listed above:

1938 Some interesting problems in the study of porisms. *Amer. Math. Monthly* 45:402–03 #6. Presented to a meeting of the MAA, Carbondale, IL, 13–14 May 1938.

Presentation not listed above:

Topics in geometry. Presented to the NCTM, St. Louis, MO, 14 Mar 1969.

References to: AmMSc 6–8, 9P–11P; AmMWSc 12P; AmWom 1935–40.

“Josephine Chanler.” (Obituary) *Champaign-Urbana News-Gazette*, 24 Dec 1992.

Other sources: PhD dissertation vita 1933; Owens questionnaires 1937, 1940; Josephine Chanler, conversations with author, 1 Oct 1981, and with author and Uta C. Merzbach, 24 Mar 1983; P. W. Ketchum, conversation with author and Uta C. Merzbach, 23 Mar 1983, Urbana, IL; Urbana Free Library.

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