The History of the YSU Department of Mathematics

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Introduction

The exprit de corps and romance of any university must be centered upon that queen and servant of science-mathematics. To understand the history and objectives of The Department of Mathematics, at Youngstown State University, one must briefly trace back to the origin and philosophy of the University. While the aim of YSU has been always centered upon the availability of higher education to all high school graduates and upon the provision of special education to all members of the local society, the University has been repeatedly tagged as a "school of second chance." Further, a study of the continuous growth in the faculty body at the University, reveals an extensive reliance and use of limited service faculty.

This historical trace of the history of the Department of Mathematics, at YSU, includes a listing of significant data (presented in chronological order), identifying the stages of evolvement of the present university, the identity of departmental quarters, and the record of full service faculty who have served or are presently serving the mathematic community.

The data and facts presented are taken from the following sources: microfilms of The Youngstown Vindicator Newspaper, since the 1880's; The City of Youngstown Directory, 1898; notes from the forthcoming publication, Skardon A., The History of Youngstown State University; Bulletins of the (College) University, 1933-present; (College) University Yearbooks, 1933-present; and also records of the Department of Mathematics.

Identity of The Academic Institution

The origin and growth of the academic institution, today identified as <u>Youngstown State</u> <u>University</u>, traced herein chronologically, with appropriate attention and description given to mathematics programs, service units and eventual establishment of the Department of Mathematics.

1888...origin of Youngstown State University, from the YMCA establishment known as The Youngstown Association School — a school which provided public school education for men and boys; classes were held at the old Central YMCA, the new YMCA, and other downtown buildings as Lustig's and Hartzell's.

1896...annual report of the YMCA revealed a total enrollment of 168 students; the examination in Arithmetic, evaluated by The International YMCA Committee, showed Youngstown students ill-prepared (perhaps because the local YMCA school dutifully prepared men for immediate industrial employment, with instructions given not in accordance to any plan of higher education)

- 1898...mathematical course work illustrated in the October 1898 issue of The Youngstown Vindicator giving the following descriptions:
 - "<u>Arithmetic</u>-for men who need it in their business. Not a fancy study, but a hard, practical, common sense study on an everyday subject, needed by every man," Mon. and Wed., 7:30 p.m. Prof. G. H. Lamb.
 - "Algebra-intended largely for machinists, draughts-men, and accountants who use it in their business." Mon. and Wed., 9:00 p.m. Prof. G. H. Lamb.
 - "Applied Mechanics-treating of force and its measurement, laws of machines, horse-power, transformation of energy, friction, etc. Those who have some knowledge of mechanical drawing should take this course without fail." Fri., 7:30 p.m. Prof. C. W. Ohland.
 - (The City of Youngstown Directory of 1898 identities Messr. Lamb as Principal of Wood Street School, and Messr. Ohland as a practicing engineer.)
- 1908... The YMCA Associated School expanded its offering to include <u>college level</u>, as well as secondary school level courses. The YMCA School of Law was organized.
- 1920... The State of Ohio granted the awarding of the degree, <u>Bachelor of Laws</u>; also, other programs (in addition to Law) were initiated, as in Business Administration.
- 1921... The Youngstown Association School became <u>The Youngstown Institute of</u> Technology; also, the Institute went co-educational.
- 1923... The Bonnell estate, located at 315 Wick Avenue (today, marking the site of Reynolds and Bookout, Inc. auto parts dealers), was leased to the Institute.
- 1925... The John Wick estate, located at 410 Wick Avenue (today, marking the site of The Jones Administration Building), was purchased by the Institute.
- 1927... The <u>first full-time</u> day program of study was offered; also, The Henry Wick estate (adjacent to and north of the John Wick estate, marked today as the eastern grounds of the Maag Library) was leased to the Institute.
- 1928... The name of the school was changed to <u>Youngstown College</u>.
- 1930... The first AB (Bachelor of Arts) degree was awarded by Youngstown College.
- 1931... (Oct. 1, 1931) The Administrative Building (now called Jones Hall) was dedicated.

1938... The Henry Wick estate was purchased to establish the quarters of <u>The School of</u> Business Administration.

1946... The Rayen Building was leased to establish The Rayen School of Engineering.

1950... Clingan-Waddell Hall (formerly a YMCA Youth Center) was donated to the College, housing the departments of Mathematics, Home Economics, and Metallurgical Engineering.

1956... Youngstown College was renamed <u>Youngstown University</u>, a private university, with total student enrollment of 4,500.

1967... Youngstown University became a state university of Ohio, and renamed Youngstown State University; also, the Engineering Science Building was completed, housing the Department of Mathematics, and also departments of the Rayen School of Engineering.

1976... The College of Applied Science and Technology building, nearing completion, was occupied by the Department of Mathematics and many departments of The College of Applied Science and Technology (formerly titled as The Technical and Community College).

Formation of The Department of Mathematics

From the 1932-33 Youngstown College Bulletin, it is noted that the total college enrollment equalled 250 students, with a total faculty and administrative staff of 25 members. One faculty instructor, assigned to teach mathematics and physics course, was <u>Dr. Castle Foard</u> (Ph.D., Univ. Of Iowa). The college offered <u>a Four Year pre-Engineering Course of study</u>, for the <u>AB degree</u> with a <u>major in Mathematics or Physics</u>. This program required 29 semester hours of mathematics (College Algebra, 4 hrs; Trigonometry, 3 hrs; Analytic Geometry, 3 hrs; Calculus, 10 hrs; Differential Equations, 3 hrs; Vector Analysis <u>or</u> Theory of Light, 3hrs; and History of Mathematics <u>or</u> Modern Physical Theory, 3hrs.) the first appearance of a mathematics degree program is during academic year 1932-33, with a <u>Four Year Course for the AB in Mathematics</u>, requiring 32 semester hours of mathematics (College Algebra, 4 hrs; Trigonometry, 3 hrs; Analytic Geometry, 3 hrs; Calculus, 10 hrs; Differential Equations, 3 hrs; Analytic Mechanics, 3 hrs; and 6 additional hrs. Of mathematics electives).

In <u>1940</u>, Dr. Foard was assisted in the instruction of mathematics by full-service members as Denton Doll (MS, Case School of Applied Science) and Edith McKissock (MA, Univ. of Akron), and also by two limited service faculty. It is important to note herein that the Department of Mathematics and also the Rayen School of Engineering were not formally founded as of this date!

During academic year 1944-45, Dr. Foard is on leave of absence, entering governmental service; hence the mathematics instruction was handled by Miss McKissock and four limited service faculty members. In 1946, the Rayen School of Engineering is established. Also, in 1947, four instructors of mathematics are located in

The Department of Engineering within the Rayen School of Engineering; namely, Frank Malak, Valentina Potor, Thomas Smith, and Marcia Welsh. In 1948, Bernard Yozwiak joins the Department of Engineering. In 1950, The Department of Mathematics officially emerges, with Frank Ellis serving as Acting Dean od Department of Mathematics, Physics (as well as serving as Acting Dean of the Rayen School of Engineering). Full service mathematics faculty included Frank Malak, Valentina Potor, Marcia Welsh, and Bernard Yozwiak. Seven limited service mathematics faculty members are listed in the 1951-52 bulletin.

In the fall of 1952, Dr. Richard Gosselin (Ph.D., Univ. of Chicago), joins the university as Head of The Department of Mathematics, assisted by full service faculty members Malak, Potor, Welsh, and Yoswiak, and eight limited service faculty. The AB degree, with a major in mathematics, then required 41 semester hours (Freshmen Mathematics, 10 hrs; Calculus, 10 hrs; Theory of Equations, 3 hrs; Differential Equations, 3 hrs; History of Mathematics, 3 hrs; and mathematics electives, 12 hrs.). Upon the departure of Dr. Gosselin in 1956 (to relocate at the University of Connecticut; area of interest in Fourier Analysis), Prof. Malak was appointed Acting Chairman of the Department; and in 1960, Prof. Malak was officially made department chairman. In 1963 however, Prof. Malak relinquished the chairmanship, so to devote all of his efforts to teaching and the study of mathematics and foreign languages. Dr. Bernard Yozwiak was then appointed department chairman.

In 1967, the University emerges as a state-affiliated university, and the Department of Mathematics was changed with more responsive tasks – to continue to serve the community through mathematics teaching, preparing the student with sufficient skills so to become productive citizens; also, to nurture a graduate program.

Through Dr. Yozwiak's leadership, the department expanded to a staff of twenty-six (26) full-service faculty, with areas of specialization and interest in many fields of mathematics and allied sciences. In 1971, Dr. Yozwiak was elevated to the position of Dean of The College of Arts & Sciences. In 1972, Dr. Luke Zaccaro, formerly Professor at Worcester Polytechnic Institute, was selected as Department Chairman. Due to the untimely death of Dr. Zaccaro, in March, 1977, the dynamic leadership and responsible charges of the department, was assigned to Dr. Dean Brown, Acting Chairman of The Department of Mathematics.

I. LIST OF CHAIRPERSONS

Department of Mathematics, YSU

| Name | Year | Role |
|----------------------|-----------|-------------|
| Foard, Castle W. | 1931-1944 | Supervisor |
| McKissock, Edith J. | 1944-1946 | Supervisor |
| Petretich, John | 1946-1947 | Supervisor |
| Potor, Valentina | 1947-1950 | Supervisor |
| Ellis, Frank J. | 1950-1952 | Acting Head |
| Gosselin, Richard P. | 1952-1956 | Head |
| Malak, Frank J. | 1956-1960 | |
| Yozwiak, Bernard | 1966-1971 | Chairman |
| Marvrigian, Gus | 1971-1972 | |
| Zaccaro, Luke N. | 1972-1977 | Chairman |
| Brown, Dean R. | 1977- | |

II. LIST OF FULL SERVICE FACULTY

Department of Mathematics, YSU

| Year | Name | Alma mater | Years |
|------|--------------------|---|---------------------------|
| 1931 | Foard, Castle W. | (Ph.D., U. Iowa) | (Math/Physics-1931-1944) |
| 1731 | roaru, Castie w. | (FII.D., U. 10wa) | (waun/finysics-1931-1944) |
| 1940 | Doll, Denton T. | (BS., Case School | (1940-1941) |
| | , | Applied Science) | |
| | McKissock, Edith | (MA., U. Akron) | (1940-1946) |
| | J. | | |
| 1942 | Bostwick, Donald | (BS., U. Michigan) | (1942-1944) |
| | L. | - | |
| 1946 | Petretich, John S. | (M.Ed., U. Pittsburgh) | (1946-1947) |
| | | | |
| 1947 | Malak, Frank J. | (M.Litt, U. Pittsburgh) | (1947-1975) |
| | | | |
| | Potor, Valentina | (MA., Indiana U.) | (1947-1953) |
| | Smith, Thomas C. | (MA., New York U.) | (1947-1949) |
| | Welsh, Marcia | (M.Litt, U. Pittsburgh) | (1947-1957) |
| 1948 | Yozwiak, Bernard J | (Ph.D., U. Pittsburgh) | (1948-1971) |
| 1952 | Gosselin, Richard | (Ph.D., U. Chicago) | (1952-1956) |
| | P. | | |
| 1956 | Dillion, Thaddeus | (Ph.D., U. Pittsburgh) | (1956-) |
| | M. | , | |
| | Dusteheimer, Oscar | (Ph.D., U. Michigan) | (1956-1960) |
| | L. | , | , , , |
| | Mavrigian, Gus | (MS (Math), | (1956-) |
| | _ | Carnegie Inst. | |
| | | Ph.D., (Engr.) U. | |
| | | Akron) | |
| | | · | |
| 1957 | Carl, George F. | (MA., Ohio State U.) | (1957- 1958) |
| | | <u> </u> | |
| | Ricksecker, Cleve | (Ed.D., U. Pittsburgh) | (1957-1966) |
| | W. | | |
| | Whipkey, Nell G. | (MS. Ed., Westminster) | (1957-) |
| 1059 | Ciotala Emanla A | (MA Dannaylyania C4 | (1059 |
| 1958 | Ciotola, Frank A. | (MA., Pennsylvania St. | (1958-) |
| | Stauffor Clarica | U.) | (1059 1062) |
| | Stauffer, Clarice | (MA., Ohio State U.) | (1958-1962) |
| | | | |

| Year | Name | Alma mater | Years |
|------|-------------------------|--|---|
| 1959 | Whipkey Kenneth | (MA.(Math), Kent State U. Ph.D., (Psy.) Case- Western) | (1959-1968) |
| 1960 | Fowler, Gertrude | (AB., Miami U. (Ohio)) | (1960-1961) |
| | Hurd, Raymond W. | (Ph.D., Ohio State U.) | (1960-) |
| | Knauf, Leland W. | (MS.Ed., Kent State U.) | (1960-) |
| 1963 | Biles, Marilyn E. | (MS., U. Pittsburgh) | (1963-) |
| 1966 | Conti, Andrew | (BS,. Youngstown U.) | (1963-1967) |
| | Craver, Mary E. | (MA., Columbia U.) | (1966-1968) |
| | Kozarich, Stephen | (Ph.D. Colorado State U.) | (1966-) |
| | Mortellaro, Nicholas | (MS., Rensselaer Poly. Inst) | (1966-) |
| | O'Donnel, Mary G. | (MS., U. Pittsburgh) | (1966-1968) |
| 1967 | Cleary, John R. | (MA., Central Michigan U.) | (1967-) |
| | Goldstein, Emily K. | (MA., Columbia U.) | (1967-)* |
| | | | *1961-1967, School of Business Admin., YSU |
| | Mamrick, Michael S. | (MA., Kent State U.) | (1967-1969) |
| | Poggione, James P. | (MS., Case-Western Res. U.) | (1967-) |
| | Rodfong, Staman F. | (MS., Case- Western Res. U.) | (1967-) |
| 1968 | Altinger, Joseph P. | (Ph.D., Case-Western Res U.) | (1968-) |
| | Banilower, Howard | (Ph.D., Purdue U.) | (1968-1970) |
| | Demen, Theodosius | (Ph.D., St. Louis U.) | (1968-) |
| | Helling, Martin | (Ph.D., U. California) | (1968-) |
| | Santos, Eugene S. | (Ph.D. Ohio State U.) | (1968-) |
| | Subramanian, Balak | (Ph.D., Lehigh U.) | (1968-) |

| Year | Name | Alma mater | Years |
|------|-------------------------|-----------------------------------|-------------|
| 1969 | Faires, John D | (Ph.D. U. South | (1969-) |
| | | Carolina) | |
| | Klein. Albert J. | (Ph.D., Ohio State U.) | (1969-) |
| 1970 | Barger, Samuel F. | (Ph.D., U. Minnesota) | (1970-) |
| | Brown, Dean R. | (Ph.D., Ohio State U.) | (1970-) |
| | Buoni, John J. | (Ph.D. U. Pittsburgh) | (1970-) |
| | Burden, Richard L. | (Ph. D. Case-Western. Res. U.) | (1970-) |
| 1972 | Zaccaro, Luke N. | (Ph.D., Syracuse U.) | (1972-1977) |
| 1975 | Dandapani, Ramaswami | (Ph.D., Iowa State U.) | (1975-) |

TABLE OF NUMBER OF FULL SERVICE & LIMITED

SERVICE FACULTY

Department of Mathematics, YSU

| Academic | Full Service | Limited | Academic | Full Service | Limited |
|-----------|--------------|----------|-----------|--------------|-----------|
| Year | | Service | Year | | Service |
| 1933-1934 | 1 | 1 | 1955-1956 | 4 | 12 |
| 34-35 | 1 | 1 | 56-57 | 6 | 15 |
| 35-36 | 1 | 1 | 57-58 | 8 | 22 |
| 36-37 | 1 | 1 | 58-59 | 9 | 21 |
| 37-38 | 1 | 1 | 59-60 | 10 | 17 |
| 38-39 | <u>1</u> | <u>1</u> | 60-61 | <u>12</u> | <u>10</u> |
| 39-40 | <u>1</u> | 2 | 61-62 | <u>11</u> | <u>12</u> |
| 40-41 | <u>3</u> | <u>2</u> | 62-63 | <u>10</u> | 9 |
| 41-42 | <u>2</u> | <u>3</u> | 63-64 | <u>12</u> | <u>12</u> |
| 42-43 | 3 | 4 | 64-65 | 12 | 17 |
| 43-44 | 3 | 4 | 65-66 | 12 | 17 |
| 44-45 | 1 | 4 | 66-67 | 15 | 28 |
| 45-46 | 1 | 4 | 67-68 | 19 | 18 |
| 46-47 | 1 | 5 | 68-69 | 22 | 21 |
| 47-48 | 4 | 8 | 69-70 | 23 | 18 |
| 48-49 | 5 | 8 | 70-71 | 26 | 24 |
| 49-50 | 4 | 8 | 71-72 | 25 | 17 |

| Academic | Full Service | Limited | Academic | Full Service | Limited |
|----------|--------------|---------|----------|--------------|---------|
| Year | | Service | Year | | Service |
| 50-51 | 4 | 7 | 72-73 | 26 | 14 |
| 51-52 | 4 | 8 | 73-74 | 26 | 26 |
| 52-53 | 5 | 8 | 74-75 | 26 | 38 |
| 53-54 | 4 | 9 | 75-76 | 26 | 40 |
| 54-55 | 4 | 13 | 76-77 | 26 | 40 |

Prepared by the Department of Mathematics Public Ceremonies Committee, June 1, 1977

L. Knauf, G. Mavrigian, S. Rodfong