

STEM BUILDING
AND CONFERENCE CENTER

open house



STEM



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STEM BUILDING
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TUESDAY, NOVEMBER 4, 2014



HISTORY OF
SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)
AT
THE UNIVERSITY OF ARKANSAS AT PINE BLUFF

THE EARLY YEARS 1875-1950

The mathematical and natural sciences have always been an integral component of the academic curriculum at the University of Arkansas at Pine Bluff. The university opened its doors in 1875 as Branch Normal College, a branch of the normal department of the Arkansas Industrial University. Its primary mission was to provide educational opportunities for the state's newly freed slaves and to train teachers for the foresaid population.

The college was under the leadership of Joseph Carter Corbin, the former state superintendent of public instructions, who was a learned scholar and mathematician. The entrance requirements to the college and the curriculum for mathematics and the sciences at Branch Normal were the same as that of the larger state university. The curriculum included courses in basic arithmetic as well as geometry, algebra, botany, physics, general chemistry, analytical geometry, calculus and plane trigonometry. The curriculum which also included a course in Latin was rigorous, but many students met the challenge and successfully completed the requirements. It is apparent that during the first 16 years of its existence, the college was a normal school training teachers.

In 1891, the Board of Trustees of the Arkansas Industrial University accepted the provision of the Second Morrill Act of 1890, making Branch Normal a land-grant institution which would require the teaching of agriculture and mechanic arts. In its educational offering the college had since its beginning found it necessary to maintain high school, elementary, and the collegiate programs. This often required the use of the same facilities and the same teachers for all three levels. The course requirements in the sciences and mathematics were the same for both the normal course, for the licentiate of instruction (L.I. degree), and the classical course for the bachelor of arts (BA degree). But by 1911, the college had been stripped of the higher branches of study, i.e., Latin, mental philosophy, ethics, leaving the college as basically an elementary and high school with one year of college study.

In 1921, the name of the school was changed to the Arkansas Agricultural Mechanical and Normal School to reflect the dual purpose of the school as a Land-Grant Institution. During the administration of Robert Malone in 1925, the school was raised to the level of a junior college. The college, for the first time, was divided into six divisions of study. The programs offered were as follows:

Normal Training

Scientific Courses (Premedical)

Teacher Training in Smith-Hughes Agriculture

Teacher Training in Household Economics

Teacher Training in Trades and Industries

Summer School

A minimum of two years was required for the completion of any one course of study. The 60 semester hours required in the

scientific courses included courses in chemistry (12 hrs.), physics (8 hrs.), biology (8 hrs.), advanced botany or zoology (3-6 hrs.), algebra and trigonometry (3-6 hrs.).

In 1927, the name of the institution was changed for the second time from Arkansas Agricultural, Mechanical and Normal School to the Agricultural, Mechanical and Normal College. An independent board of trustees was appointed by the governor, which completed the separation of the institution from the University of Arkansas. Plans for the reorganization of the college into a four year degree granting institution had been laid by 1928. It was during the administration of John Brown Watson that the college was relocated, in 1929, from its site between Second Avenue, north, Fourth Avenue, south, Cedar Street, west and Mulberry Street on the east, to a new site (present location) on a 182 acre farm (two miles outside the city limits of Pine Bluff). The new location and facilities allowed the college to carry out its mission as a multi-purpose college.

The major achievement of Watson's administration was the building of a four year degree-granting and multi-purpose senior college. When Watson assumed the presidency, the college was at the level of a junior college and those students aspiring to work toward a bachelor's degree had no other alternative but to go out of state.

The 1928-29 school year started with four divisions: the Division of Agriculture, the Division of Education, the Division of Home Economics, and the Division of Arts and Sciences which led to departmentalizing of the college for the first time. The eight new buildings constructed when Watson, his students and faculty moved to the new site in December 1929, included the administration building, home economics building, mechanical arts building, two dormitories, the president's home, a power plant and an elementary training school. The new campus offered the students and faculty a greatly improved environment and facilities for learning.

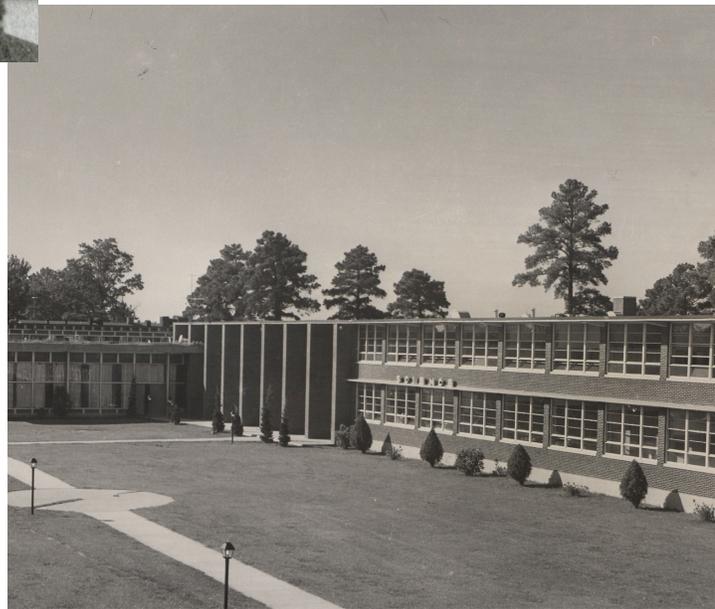
Following the untimely death of Watson in 1943, Dr. Lawrence A. Davis, Sr., was named president of the college. As he set out to transform his visions of a quality college for Blacks in Arkansas, the world was caught in the grip of

WWII. As a result, the enrollment at the college dropped to a new low as many of the young professors were called into military services.

With the veterans returning from war, the student body had increased from less than five hundred to an all-time high of more than 2000. Curricular offerings were enriched to meet the need of the fast-paced world. Through the untiring



Above: Kountz-Kyle Hall
Inset: Dr. Samuel Kountz



Larrison Hall



Walker Multi-purpose
Research Center



Inset below:
Dr. Charles Walker, Chancellor,
1986-1991





efforts of President Davis, the Board of Trustees and the generosity of Governor Sydney McMath and the State Legislature the College launched a building program in 1949, costing more than \$1.5 million. A new science building was completed in February 1951. The modern red brick structure included the latest in laboratory facilities for the sciences. The two story structure provided space for freshman science and biology on the first level, and facilities for chemistry and physics on the

second level. Laboratories were also included for botany, zoology and other higher sciences. The new building also offered limited research facilities for the faculty. Since the 1950s, the university has continued to make great strides in the expansion of its facilities and curricula offerings in the mathematical and natural sciences as we prepare our graduates to compete in an ever changing world. Listed below are some of the many milestones in the history of STEM at UAPB:



- Construction of a modern free standing science building (Larrison Hall) with state-of-the-art laboratories and classroom facilities in 1951;
- Increase in faculty members holding doctoral degrees and expansion of curricula offerings in the sciences in 1950;
- Medical Technology Program offered in cooperation with the University of Arkansas Medical Sciences Center at Little Rock, St. Joseph's Hospital in Memphis, Tennessee, and St. Vincent Infirmary in Little Rock in 1970s;
- Science graduates pursuing professional degrees greatly increased during the 1960s and 70s;





- The college rejoined the University of Arkansas and the name is changed to the University of Arkansas at Pine Bluff in 1972;
- Construction of Kountz-Kyle Hall (originally named the Advanced Science Building), a modern facility for biology, chemistry, mathematics and physics with state-of-the-art classrooms, laboratories and research facilities for the faculty in 1974;
- Pre-engineering program, three-year transfer program offered in cooperation with Howard University in 1978;
- Bachelor of science degree in computer science program offered for first time in 1980;
- Minority Access to Research Careers (MARC) program available for junior and senior science majors in 1986;
- The Walker Center for Multi-Purpose Research established to provide research facilities for the science faculty and students in 1987;
- Construction of new modern facility (Caine-Gilleland Hall) to house the Department of Chemistry and Physics and the Computer Science Program with state-of-the-art classrooms and laboratories in 1992;
- The Department of Industrial Technology (formerly the Department of Vocational Arts) is merged with the Department of Mathematics and Physics to form the Department of Mathematical Sciences and Technology in 1997;
- UAPB awarded a \$2.5 million Historically Black Colleges and Universities – Undergraduate Program (HBCU-UP) STEM Grant by the National Science Foundation in 2004 (The program is designed to help increase the number of minorities in science, technology, engineering and mathematics; the grant was renewed in 2009);
- UAPB awarded a \$3.5 million Arkansas - Louis Stokes Alliance for Minority Participation (ARK- LSAMP) Grant from the National Science Foundation in 2008 (the program is designed to help increase the number of minorities in science, technology, engineering and mathematics by creating state synergy with eight other Arkansas colleges and universities; the grant was renewed in 2013);
- UAPB awarded \$3 million by the U.S. Department of Education HBCU Master’s Degree Program for Enrichment of existing and development of new STEM graduate programs (the M.Ed. Programs in science and mathematics education were enriched and a new M.S. degree in computer science and technology was approved fall 2012; the award included the first \$1.5M for construction of UAPB STEM Academy and Conference Center);
- 2002-2014: \$15 million in funding to UAPB for innovative and successful STEM interventions to increase the number of well-prepared underrepresented minorities STEM graduates (funding agencies include the National Science Foundation, the U.S. Department of Education and the Arkansas Science and Technology Authority);
- 2009-2014: UAPB was awarded \$6,497,681 in Title III Strengthening HBCU Program, Student Aid Fiscal Responsibility (SAFRA) for construction of STEM Academy; and
- 2013-2014: Governor Mike Beebe awards \$750,000; Senator Linda Chesterfield awards \$100,000; Representative Charles Armstrong awards \$20,000 for the STEM Academy and Conference Center. The people of Arkansas along with St. Paul Missionary Baptist Church and Dr. Carolyn Blakely contributed funds for the STEM Academy and Conference Center.

Ground breaking for the \$10 million, 29,000 square foot STEM Academy and Conference Center was held on November 16, 2012. Today, November 4, 2014, we celebrate this 21st Century, state-of-the arts facility with an Open House Ceremony.





UNIVERSITY
of ARKANSAS
AT PINE BLUFF

STEM BUILDING AND CONFERENCE CENTER

open house

Emcee **Dr. Mary E. Benjamin**
*Vice Chancellor for Research, Innovation and Economic Development
Principal Investigator, UAPB STEM Scholars Academy*

Meditation **Reverend Steven King**
Pastor, St. Paul Missionary Baptist Church

Greetings and Overview **Dr. Laurence B. Alexander**
Chancellor, University of Arkansas at Pine Bluff

Introduction of the Governor of Arkansas **Chancellor Laurence B. Alexander**

Address **The Honorable Mike Beebe**
Governor, State of Arkansas

Remarks **The Honorable Shane Broadway**
Director, Arkansas Department of Higher Education

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President, University of Arkansas System

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Arkansas State Senate

The Honorable Henry “Hank” Wilkins, IV
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Acknowledgements

Ribbon Cutting

Guided Tours by **UAPB STEM Scholars,
Carolyn F. Blakely
Honors College Students,
and UAPB Golden Ambassadors**

Food Service by Thompson Hospitality



The Honorable Henry "Hank" Wilkins, IV
STEM Building Campaign Chair

Thank You

*Your leadership, words of encouragement
and unwavering support of the
University of Arkansas at Pine Bluff
and its STEM initiatives
are appreciated and will be valued
by generations yet to study here.*

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FUNDING SOURCES

U. S. Department of Education
*Office of Postsecondary Education, Institutional Services Program, Title III Part B Strengthening
Historically Black Colleges & Universities Program and Student Aid and Fiscal Responsibility Act*

U.S. Department of Education
Master's of Science Degree at Historically Black Colleges & Universities

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Arkansas State Senator

The Honorable Charles Armstrong
Arkansas State Representative

St. Paul Missionary Baptist Church
Pine Bluff, Arkansas

Dr. Carolyn F. Blakely

The Taxpayers of Arkansas

Sincere thanks are extended to all individuals and agencies who
have invested in our STEM educational and research programs.

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The contributions of Mr. Henri Linton, Sr., Ms. Kittilea Jackson, and Ms. Stephanie Sims for research and narrative of the STEM History are gratefully appreciated.

The 29,000 square foot STEM Complex is devoted to academic collaboration, teaching, learning, student support, and program administration along with multidisciplinary/multifunctional research and education labs. The new facility has a contemporary flair and uses materials related to the existing campus architecture. The two-story complex features ample natural lighting and “green” building technology and utilizes locally available green building materials. The emergency generators will utilize locally manufactured biodiesel fuel produced from Arkansas soy beans. The complex has other energy saving features such as including the glass, automated window blinds, use of solar power, grey water recovery system and an interactive building control system

Architect



Ron Bene' Woods, AIA

Construction Manager



Robert Wall, Jr., CEEP

Director of Facilities Management

O. C. Duffy, Jr.

Quality Control
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