SCHOOL OF SCIENCE & HUMAN DEVELOPMENT
The mission of the School of Science and Human Development at Methodist University is to provide an engaging and rigorous learning environment with a strong liberal arts foundation that helps to prepare successful scientists, mathematicians, engineers, educators, professionals in technology and exercise science, and graduates who may choose to pursue advanced degrees at the postgraduate level in their respective disciplines in the global community of the 21st century.
The purpose of this research is to examine the content in a select group of sports products.

- Analytes: dill pickle juice, sweet pickle, cider vinegar, E-Lyte Sport Concentrate, Smartwater, and Propel

Figure 1. The sample...
Understanding biology means better knowing yourself and the world around you; from cells to the environment and all the interactions in between. Biology majors can pursue careers in a wide array of areas: pharmacologists, physician’s assistants, wildlife biologists, dentists, veterinarians, doctors, and geneticists, just to name a few.

MISSION

The Methodist University Biology Department provides a supportive, rigorous and hands-on learning environment for students. Our undergraduate curriculum is designed to give students the flexibility to train for careers in the health sciences, academic research laboratories, the private sector, and governmental agencies immediately following their undergraduate program, as well as to prepare students for entry into traditional life science and professional graduate programs.

DEGREES AWARDED: Associate of Science (A.S.)
Bachelor of Science (B.S.)
“At Methodist, there is much discussion about a ‘journey’— looking back now as a graduate, my senior research project was most definitely mine. After my final presentation, I realized that the faculty of the Biology Department had truly become like family to me over the years. I am forever grateful to have had such brilliant mentors who guided and enabled me to see my full potential throughout my undergraduate career.”

— Stephanie Dewell ’16
Biology
Veterinary Assistant at Banfield Pet Hospital
CHEMISTRY

Chemistry and the Physical Sciences are noted to be the most central of all the natural sciences. The strength of the Chemistry and Physical Science Department of Methodist University is its size. It provides tremendous opportunities for personal development through students’ direct interaction with the professors. The program is progressive, challenging, and exciting, with excellent faculty and staff who are supportive of the students’ educational endeavors. Research in natural products and analytical forensic chemistry provides further value to the student’s future career, either in graduate school, professional schools, or industry.

MISSION
The department will instill a solid fundamental knowledge of the physical sciences within our students and further enhance that knowledge through scientific applications and experiences. Students will develop critical and active thinking, problem-solving, and data analysis abilities by being involved in a hands-on scientific discovery process that is related to theory and real life through student-faculty research projects.

DEGREES AWARDED: Associate of Science (A.S.)
Bachelor of Science (B.S.)
“As an International student, with English as my second language, the faculty and staff members were happy to help me whenever I was lost in translation. They care for the students on a personal level despite the differences in color, sex, gender, and other backgrounds. This warm environment made me feel like I matter in a place where professors make time for me and other students. Whether it is in class, the laboratory, or outside the field, there is nothing too much for the professors to handle. I came here only interested in chemistry, but I’ll be leaving with a passion for studies that use chemistry to tackle the environmental problems around us. I intend to apply the knowledge to my hometown where most laboratory classes are taught theoretically with very little equipment.”

— Jepther Kayila ’17
Chemistry
Kahama, Shinyanga, Tanzania
The Department of Computer Science at Methodist University offers majors and minors in Computer Science and Computer Information Technology. Subject areas include programming, data structures, software and system design, operating systems and database management, computing theories, graphics, mobile applications, and game development. Some of our graduates start their careers with various IT companies, and some choose to pursue advanced graduate degrees in computer science and information technology.

MISSION
The mission of the department is to provide an engaging learning environment and quality curricula for our students to attain the skills and knowledge in the field of computing and information technology, and empower them to become successful problem solvers, lifelong learners, and competent professionals in the field.

DEGREES AWARDED: Associate of Science (A.S.)
Bachelor of Science (B.S.)
"The best part of the Computer Science program at Methodist University is the professors. They truly know what they are doing and it shows both inside of the classroom and out. While inside of the classroom, they do not simply lecture, they create a comfortable environment that gets students engaged and more passionate about the material. Outside of the classroom, they challenge students to continue to learn outside of the course material. Thanks to the program, I was able to develop a strong software engineering background and the ability to continuously learn about and apply cutting-edge technology within my work; both of which are necessary within the workforce."

— Elvin Bounphangsy ’17
Webmaster, Stanly Community College
Teaching is an intellectually demanding, high-energy field with ample room for professional growth. Methodist is proud to prepare some of the best and brightest teachers of tomorrow. The MU teacher education program believes the primary purpose of teaching is to provide every child the opportunity and instruction needed to maximize his or her talents, ability, and ethical potential.

MISSION
The Methodist University Teacher Education Program prepares students to become dynamic, engaging teachers who have a commitment to teaching all children. The department is oriented towards reflective, student-driven practice; research that is authentic and reflects university and community needs; consistent improvement; and content mastery.

DEGREE AWARDED: Bachelor of Science (B.S.)
Bachelor of Arts (B.A.)
“Prior to entering college, I knew that I wanted to be a special education teacher; it is something I have always been certain about. Here at Methodist, I was able to foster and grow that passion. I have been in numerous field placements that have given me the chance to observe and administer lessons. It’s great, because the research and theories that I have learned throughout the coursework I immediately applied to the classroom setting. I have learned that it is okay to make mistakes, because that is how people learn and adapt. I am confident in my teaching abilities and I can thank Methodist University’s Education Department for that certainty.”

— Emily Erwin ’17
Special Education
Frederick, Md.
The Methodist University engineering curriculum offers flexibility so that each student may focus on his or her own interests such as health care, sports analysis, information systems, product development, and design, or business, while still obtaining the strong foundation necessary for a career or graduate school in any engineering field. A concentration in Industrial Engineering provides additional knowledge in productivity, efficiency, and safety as applied to various industry sectors, such as energy, entertainment, health care, military, retail, sport, recreation, and transportation.

MISSION
The mission of the engineering program is to be a world-class engineering program that embraces diversity and prepares students to be well-rounded individuals. The program provides a comprehensive curriculum that integrates engineering and the liberal arts, creates hands-on experiences in and out of the classroom, and produces engineers ready to work on multi-disciplinary teams, communicate effectively with others, and solve complex technical problems.

DEGREE AWARDED: Bachelor of Science (B.S.)
“The Engineering Program at Methodist University has provided me with intimate class settings where I have been able to get one-on-one help from the professor and also participate in hands-on projects. These projects have challenged us to develop solutions for issues in the real world, ranging from designing a bath assist for individuals that have a disability to redesigning parking for all of campus, a project that we were able to present to the University’s President.”

— Keith (K.J.) Hardie ’20
Engineering
Oxford, N.C.
Prime Numbers

Despite following specific rules, no known pattern/formula has been developed to calculate primes.

Prime: 2 3 5 7 etc...

2 x 2
2 x 2 x 2
3 x 3

Composite: 4 6 8 9

This property is a key reason why modern encryption systems (RSA) use primes.

MATHMATICS

Small classes and personal attention make Methodist University an excellent choice for the study of mathematics. A most demanding major, mathematics challenges students to open their mind, think in abstract terms, and put it all back together in a practical application. The emphasis is on concepts, and professors work one-on-one with students to ensure they understand and are able to take what they learn to the next level.

MISSION

The mission of the Department of Mathematics is to promote the field of mathematics and ensure that every Methodist University student acquires the necessary mathematical skills to succeed in his or her chosen career.

DEGREE AWARDED: Associate of Science (A.S.)
Bachelor of Science (B.S.)
Bachelor of Arts (B.A.)
“Studying mathematics will empower you for myriad career paths across the spectrums of industry and academia. Look no further. The math curriculum at MU is designed to challenge you – an intellectual barrage that forges technical acumen and hones critical thinking skills. My personal experience is emossed with camaraderie and growth, due in large part to the mentorship from my professors and the conviviality of the student body. Irrespective of my future endeavors, I know that studying mathematics at Methodist University has guaranteed me for success.”

— David Shane '18
Mathematics
Syracuse, N.Y.
Physical Education and Health Education majors will have the skills and knowledge necessary to become effective Physical Education and Health Education teachers. Students who earn a major in Physical Education and Health Education, with teacher licensure, are qualified to teach physical education and health education in grades K-12 in North Carolina and most other states.

Exercise and Sport Science majors will have the skills and knowledge to become personal trainers, exercise professionals, or strength and conditioning specialists. As exercise professionals, graduates will be involved in developing and implementing individualized approaches to exercise leadership in healthy populations and/or for those individuals with medical clearance to exercise.

MISSION

The mission of the Department of Physical Education and Exercise Science is to prepare professionals at the undergraduate level through excellence in teaching, research, and service so that they may encourage enhanced performance and quality of life of all citizens through active lifestyles and lifetime physical activity.

DEGREE AWARDED: Bachelor of Science (B.S.)
“The professors in the Exercise & Sport Science Program are engaging and fun! I feel I was prepared well for professional life. After graduating, I was able to acquire American College of Sports Medicine (ACSM) certification and am happily employed as a Personal Trainer and Fitness Specialist. I enjoyed the Exercise & Sport Science program so much, I have begun classes in the Master’s of Education Program in Coaching Education & Athletic Administration.”

— Seth Corbin ’17
Personal Trainer and Fitness Specialist
YMCA Fayetteville, N.C.
Methodist University’s School of Science and Human Development has over 20 state-of-the-art labs for hands-on student development, such as our Zoology Lab, where students study the animal kingdom, including the structure, embryology, evolution, classification, habits, and distribution of all animals, both living and extinct.
CONTACT

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Methodist University at a glance:

**ACADEMICS**

- 2,478 total enrollment
- 42 states are represented
- 86 diverse majors, minors, and areas of concentration
- 94% of classes have less than 30 students
- 15:1 student-to-faculty ratio ensures you receive the personal attention you deserve

**OUTCOMES**

- 3.88 average number of years SSHD graduates earn their bachelor’s degree in the 2016-2017 school year
- 80 out-of-state students were enrolled in the SSHD program during the 2016-2017 school year
- 50 international students were enrolled in the SSHD program during the 2016-2017 school year

**Top Tier**

-ranking in *U.S. News & World Report*