

## Project Lead The Way Biomedical Sciences (1440)

Get a head start on your future career by beginning the Biomedical Sciences program as a sophomore. With an extra year in the classroom and the lab, you'll gain a more in-depth understanding of the human body, cell biology, genetics, disease and other biomedical topics in an expanded sequence of four courses. The program prepares you for postsecondary education and training necessary for success in a wide variety of positions including as a physician, nurse, pharmaceutical researcher, technician and more. You'll be exposed to a diverse curriculum with a strong math and science foundation to better equip you for success in a science-related major at the university level.

Learn the role of biomedical professionals as you investigate and study the concepts of human medicine, physiology, genetics, microbiology and public health! In this program you'll examine the structures and interactions of human body systems and explore the prevention, diagnosis and treatment of disease, all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future.

Starting as a junior? Don't worry, you can enroll in the Project Lead The Way Biomedical Science (960) program.

### Project Lead The Way Biomedical Sciences (1440):How You'll Learn Hands-On

Get out of the classroom and into the real world with projects such as:

- Assessing cancer treatments
- Screening and evaluating human DNA

### Project Lead The Way

The Meridian Technology Center STEM Academy was named a Distinguished High School by Project Lead the Way (PLTW) for its Biomedical Sciences and Pre-Engineering programs. This is the fourth year in a row that the school has received this designation.

Project Lead the Way (PLTW), a national non-profit organization, developed the Biomedical Science curriculum to help deliver a rigorous college readiness curriculum to high school students. Industry leaders, who helped develop the curriculum, recognized the importance of preparing students with a solid academic foundation in science and mathematics as they

prepare to enter college. PLTW curriculum focuses on developing better problem-solving skills by immersing students in real-world preparatory-level academics and is designed to prepare students for postsecondary studies in the medical field.



## Where it Can Take You

Use the skills you'll learn in this program to find a career you'll love. Possibilities include:

- Biomedical Technician
- Biomedical Engineer
- Physician
- Biomedical Professor

## What You'll Learn

PLTW Courses	Hours
<b>PLTW Principles of Biomedical Sciences</b> Core Course - Year 1	120
<b>PLTW Human Body Systems</b> Core Course - Year 1	120
<b>PLTW Medical Interventions</b> Core Course - Year 2	120
<b>PLTW Biomedical Innovations</b> Core Course - Year 3	120
<b>PLTW AP Computer Science Principles (CSP)</b> Core Course - Year 3	120
STEM Capstone	120

Science and Math Courses	Hours
<b>Honors Algebra II</b>	120
<b>Pre-Calculus</b>	120
<b>AP Calculus AB</b>	120
<b>AP Calculus BC</b>	
<b>AP Statistics</b>	120

<b>Honors Chemistry</b>	120
<b>AP Chemistry</b>	120
<b>AP Physics I</b>	120
<b>Anatomy</b>	60
<b>Physiology</b>	60
<b>Microbiology</b>	120
<b>AP Biology</b>	120
<b>Total Hours</b>	<b><u>1440</u></b>
6 PLTW Courses	720
3 Science Courses	360
3 Mathematics Courses	360

## STEM Academy Entrance Requirements

The Biomedical Sciences program is a part of Meridian's STEM Academy. An application and interview process with the instructors will take place for all programs in the STEM Academy. For the Biomedical sciences program students must be at or above grade level in reading and mathematics and demonstrate a high interest and/or aptitude in math, science and the health fields. Applicants must have completed Algebra I with a grade of B or better. Candidates must have passed eighth grade state tests in reading and mathematics and have a minimum of a 3.0 GPA. Please contact your high school counselor about enrollment.

\*Schedule dependent upon successful completion of pre-requisites.

## Career Readiness Certificate

[WorkKeys®](#), an assessment tool from the ACT® organization, measures skills employers have identified as critical to job success in their industry and are used in hiring and promoting employees. Students are able to earn the ACT®-issued [National Career Readiness Certificate](#) by meeting the score requirements for their job field on three WorkKeys® assessments.

Matching the right employees with the right job creates employee job satisfaction, increased self-confidence and the best wages possible for the employee. The employer benefits with

reduced turnover and training, increased productivity and overall company success. To learn about the WorkKeys® scores needed for your future career field visit [Job Profiles](#).

The required WorkKeys scores for this career major are:

Applied Math - 4

Workplace Documents - 4

Graphic Literacy - 4

## Graduation Requirements

In order to be successful in a career, students will need to meet all technical and academic standards related to their career of choice at Meridian. Meridian offers rigorous programs of study designed in cooperation with business and industry to ensure students are fully prepared for the demands of the workplace.

### Meridian's Career Ready Credential

When a student completes all standards as set forth in their program of study, they will be considered a graduate of Meridian and receive the Career Ready Credential. Students who do not meet these standards will not be considered graduates of Meridian. Students should have:

- Completed all courses in a career major with a grade of "C" or above and achieved required industry-based certifications for the career major
- Achieved WorkKeys® scores at or above the level required for the career major or earned an ACT® composite score of 19 or greater (Students may substitute equivalent scores on SAT, ACCUPLACER or other approved assessments.)

### Additional Endorsements

Students earning a Career Ready Credential may also earn the Postsecondary Ready Endorsement, Citizenship Ready Endorsement and the National Career Readiness Certificate (CRC).

#### Postsecondary Ready Endorsement

- Earned, or was on track to earn, a high school diploma or GED at the time of Meridian graduation

- Achieved a subscore of 19 or greater on the ACT® in math, English, reading and science (Students may substitute equivalent scores on SAT, ACCUPLACER or other approved assessments.)

### **Citizenship Ready Endorsement**

- Completed employment profile, résumé, job application, cover letter, mock interview and job search training through [OKJobMatch.com](http://OKJobMatch.com)
- Documented active membership in a [CareerTech Student Organization](#) or professional association related to the program of study
- Documented 20 hours of volunteerism or service in a community activity

### **National Career Readiness Certificate (CRC)**

- Completed WorkKeys® assessments in Applied Math, Graphic Literacy and Workplace Documents and received a silver, gold or platinum National [Career Readiness Certificate](#) through the Oklahoma Department of Career and Technology Education.

## **Get Started**

Apply for [admission as a high school student](#). Contact the Career Planning Center with questions at [405.377.3333](tel:405.377.3333).