DISTRICT ADDS FOUR NEW MEDICAL COURSES

FHSD implements a new program geared towards students that have an interest in pursuing a career in the medical field

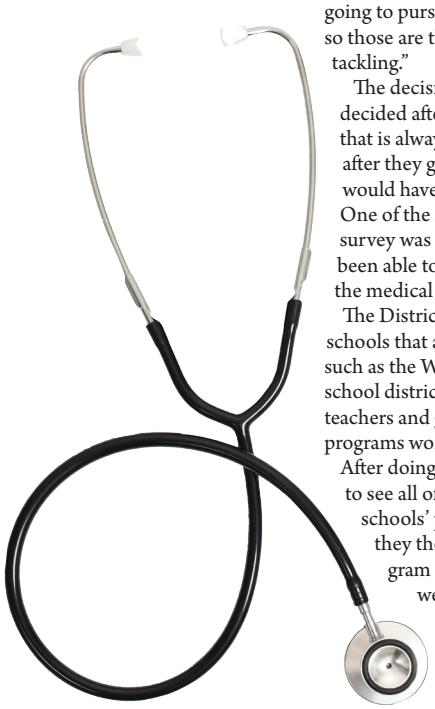
BY BRIANNA MORGAN

1006briannamorgan@gmail.com • BriMarie1006

Jesse Davila puts together part of a human spine. The students of **Dawn Hahn's** anatomy class have been studying the skeleton since the beginning of October. The students took a test on the skeletal system on Monday, Oct. 28.

Beginning in the 2014-15 school year, all high schools in FHSD will implement a brand new four-year program that is part of Project Lead the Way Biomedical Sciences. It will do so by integrating one of the four classes that formulate the four-course program each school year. The new program will allow kids who have expressed interest in a career in the medical field to explore their options and get hands-on experience and time with professionals.

"The thing I'm most excited about is the opportunity for kids to really jump in and to get to work with those hands-on, real world problems," FHSD Director of Student Learning Chris Greiner said. "Those are the types of things they are going to pursue a career in biomedical sciences for, so those are the types of issues they are going to be tackling."



The decision to introduce the new program was decided after receiving the results from the survey that is always sent out to the alumni two years after they graduate asking what courses they wish would have been offered to them in high school. One of the most popular topics that arose in the survey was that they would have liked to have been able to take more courses revolving around the medical science field.

The District officials started visiting other schools that already had the program in place, such as the Wentzville, Afton and Hazelwood school districts and talked to different students and teachers and gathered information on how their programs work.

After doing this, the District officials were able to see all of the different features of the other schools' programs and decide what aspects they thought could be used in the new program for FHSD and also see what changes were going to need to be made to better suit the specific needs of FHSD.

The only change that was made was that students will be required to have either have taken or be concurrently enrolled in biology due to the fact that the biomedical classes will count as a science credit rather than a practical arts credit as it is in the many surrounding districts. The program will most likely target eighth graders and freshmen because, in order to complete the program in its entirety, students will have to begin taking the classes their freshman year and continue taking the courses throughout their senior year.

"I think it's absolutely fabulous that they are doing this," senior Katie Davis said. "There are a lot of people who are interested in the medical field. I'm sure it would have been helpful for me to have been able to take it, but I'm not too disappointed. I'm excited for the underclassmen to be able take the classes."

Science teachers will teach the courses and in order to be certified to do so, they must attend a two-week training period at Missouri College of Science and Technology over the summer where they will be immersed in the material that they will be teaching. Then they will be tested over the material they learned to make sure that they are well educated on the topic they will be teaching students about. Depending upon how many students sign up to take the new course, there may be a shift in how many genetics and anatomy classes are offered to make room for the new program since, according to Greiner, those two classes are the most popular taken by kids who are interested in a medical career.

"I think it's probably going to be very time consuming, like a full-time job for those two weeks, but I'm excited to go through all of the activities that the kids will be going through the following year," science teacher Dawn Hahn said. "I think it will be eye-opening, and I think it will be fun."

According to Greiner, because there is such a popular demand for careers in the medical science field, the District wanted to meet the popular demands of the students and better equip them for their future in the particular medical job

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Sydney Dattilo, **Sierra Teuscher**, **Jesse Davila**, and **Connor Jansen** study how the human body is put together. In Anatomy students have been learning about the different parts of the skeletal system by playing charades and racing to put the skeletal system together. "[I like] learning the different names and learning how they all work together to support the body," Sierra Teuscher said.

Connor Jansen learns how to put together the human skeleton. The students practiced putting together the skeleton by scrambling all the pieces of the skeleton and trying to put them back together. Later in the year, the class will continue to study the other systems of the body including the circulatory system, nervous system, and respiratory system. (*abby temper*)

they are interested in.

The new program will begin with just one class in the 2014-15 school year, starting with Principles of Biomedical Sciences. In each of the following three school years, the next course in the sequence will be integrated. After the first course is implemented, the remaining three courses in the program are Human Body Systems, Medical Interventions, and Biomedical Innovations. Each of the courses is year-long and will increase in difficulty. In order to move on to the next one of the classes, the student will have to have completed the previous course.

"One of the most exciting things is that the group that starts in those classes I could, as a teacher, potentially have those students as people in my class for the rest of their years of their high school experience," Hahn said. "Being able to form that long term relationship would be pretty cool."

The estimated total cost to teach this new course is around $30,000-$40,000 per classroom. Part of the total cost will be covered by the District's proposed technology grant, the remaining cost will be figured into the District Academic Budget for the 2014-15 school year. In order to properly teach this highly hands-on class, there will need to be things such as a classroom set of laptops and miniature mannequins for the students that will be used to look at the nerves, bones, and muscles of the human body. The materials bought for the program will be able to be used in all of the Biomedical courses that follow the first course in the sequence.

"I would take advantage of the program," sophomore Sarah Garrelts said. "You get to take advantage of the hands-on opportunity, and it would give me experience in doing what I want to do as a career. It's good because since it's not college, I can always change my mind without paying for it."

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THE SCHEDULE

Over the next four years, four new medical courses will be available

2014-15

PRINCIPLES OF BIOMEDICAL SCIENCES

Students will:

- Receive an introduction to the biomedical field.
- Have a fictional character that died from a specific disease
- Have to determine factors that lead to his/her death.
- Determine what lifestyle choices they could have made or medical treatments they could have gotten in order to prolong his/her life.

2015-16

HUMAN BODY SYSTEMS

Students will:

- Focus on the structures and functions of the human body.
- Use technology to monitor body functions such as muscle movement, reflex and voluntary action, and respiration.
- Use skeletal manikins to build organs and tissues.
- Gather information and use it to design and construct an experiment around the different structures and functions of the human body.

2016-17

MEDICAL INTERVENTIONS

Students will:

- Study a fictitious family and a disease they carry.
- Focus on the prevention, diagnosis, and treatment of the disease.
- Take an up-close look on the role a particular disease plays in a person's life and also what influence genetics has over the patient and his/her family.
- See how the specific disease may have been better prevented, better diagnosed, or treated more effectively.

2017-18

BIOMEDICAL INNOVATIONS

Students will:

- Demonstrate their understanding of the material they have learned in the three previous classes.
- Be given a year-long project to work on with a mentor who is a professional from places such as universities, hospitals, research institutions, or any other place in the biomedical field.
- Present their work to science, technology, engineering, and mathematics professionals.