## **High School New Courses**

### **Board Goal**:

The changes to the high school course offerings for the 2010-2011school year outlined below support the following Board goals: Vision goal I B - remain committed to providing equitable and outstanding opportunities for every student on every campus; Teaching & Learning goal II A – cultivate a consistent, strong, district-wide balanced curriculum based on ongoing needs assessment that supports all students; and Climate goal III D – instill in students a love of life-long learning.

### Purpose of Report

The Secondary Curriculum, Instruction, and Staff Development Department received several requests from the campuses for changes in the high school course offerings for the 2010-2011 school year. Once the campuses initiated a request for the addition of a course, the Director of the Secondary Curriculum Department worked directly with all campus staff involved and the Curriculum Coordinators to evaluate the requests. The campuses in turn got appropriate and additional input and worked with the Secondary Curriculum Department to determine the best course of action. In addition, a science study group was formed to review the new changes in the high school science TEKS and recommended a re-sequencing of the science course offerings. The purpose of this report is to outline all of these requests for Board approval.

### **Objectives**

• to re-sequence the high school science courses to reflect the recent changes in the TEKS and the new End-of-Course (EOC) exams which will be part of the graduation requirements for our incoming freshman class of 2011-2012.

• to offer a new elective PE course at all three high schools which will partner students with special needs with peer mentors

• to offer a new elective AP course in social studies at Guyer High School

### **Operational Impact**

### Re-sequencing Science Courses:

High school science courses have traditionally been offered in alphabetical order since the 1950s. The decision to offer the courses alphabetically was really a default decision as the scientific community could not come to consensus on what was the best way for students to learn the science disciplines. Over 15 years ago, Denton ISD through a process involving a Secondary Science Task Force, decided to allow students to chose the order in which they met their science requirement for graduation encouraging them to take their first high school course based on interest rather than on a pre-determined ordering of courses. That new approach had much success, and students liked having options. However, when the new TEKS and TAKS test for science emerged, it was determined that to best prepare our students for the TAKS exams, that a new sequence should be followed to maximize the students' developmental skills and math

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background. This new sequence proved successful as well, and we have seen slow, yet steady improvement in science achievement.

Once again, we are faced with changes from the state with some drastic changes in the TEKS especially in the middle school science courses and high school chemistry as well as the introduction of the new state assessment at the high school level – end of course exams. A high school study group, led by Staci Saner, Secondary Science Coordinator, was formed which included the following participants: Vicky Christenson, Director of Secondary Curriculum, Instruction, and Staff Development, Melanie Lewis, Director of Counseling, Renee Koontz, DHS Associate Principal, Robyn Ford, DHS Science Department Chair, Kristi Strickland, RHS Associate Principal, Joel Hays, RHS Science Department Chair, Carl Long, RHS Assistant Principal working with science teachers, Donna Jones, GHS Dean of Instruction, Stephanie Taylor-Whitlow, GHS Science Department Chair, and Fred Younkman, GHS Assistant Principal working with science teachers. Each campus brought to the discussions information regarding teacher input about the need for change, teacher certifications, equipment inventories, and TEKS /TAKS supporting materials. After considering all variables, the consensus was to sequence the courses as follows: 9<sup>th</sup> grade – Biology, 10<sup>th</sup> grade – Chemistry, 11<sup>th</sup> grade Physics. The fourth year of science could include any AP/IB level course, Anatomy and Physiology, Aquatic Science, Environmental Systems or Principles of Technology.

The justification for changing the high school science sequence includes:

- the TEKS for chemistry have changed and the pre-requisite is now one unit of science and Algebra 1
- the new TEKS for chemistry include greater abstract concepts and a more strenuous, algebraic math component
- the EOC for chemistry, as currently understood, includes advanced chemical concepts not currently covered in our Chemistry 1 course
- the original reasons for moving chemistry to 9<sup>th</sup> grade no longer exist with the implementation of the EOCs

Moving chemistry will require a transition year when both 9<sup>th</sup> grade and 10<sup>th</sup> grade students will be taking chemistry. After reviewing all science teachers' certifications, considering equipment and lab usage, and the overall impact on the master schedule, this sequence will have the least impact and cause the least interruption to the school environment.

### New Course - Partner PE:

Partner PE is a success oriented physical education course for students with special needs and peer partners. This course can be taken for physical education credit or as an elective. Partner PE will enhance the existing academic schedule by offering a class that includes students with disabilities and students without disabilities working together to encourage physical activity while developing respect for one another. The regular PE teacher will work in collaboration with the adapted physical education teacher to create an atmosphere that promotes physical activity, acquisition of individual lifetime wellness skills, team sports, and recreational activities while fostering relationships and developing leadership skills in the peer partners. There is a developed curriculum for this course.

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### New Course - AP Comparative Government and Politics:

The AP Comparative Government and Politics course is a College Board approved course which is based on the design of college-level Introductory Comparative Government courses that focus on the comparative study of fundamental governmental concepts, political systems, and processes and outcomes of politics in a variety of country settings. This one semester course will involve the study of political science theory and methodology as well as the analysis of specific countries and their governments. The six models to be studied are the United States, Russia, China, Mexico, Nigeria, and Iran. Students will study these respective countries, the components that are universal to all political systems, and the interconnections between the citizenry and the state of politics. AP Comparative Government and Politics will give students a critical perspective of the workings of these governmental systems. It is anticipated that students interested in going into politics, majoring in social studies in college, or studying governments with a global focus will take this course.

## <u>Results</u>

#### Re-sequencing Science Courses:

The re-sequencing of the high school science courses will establish the most effective course of study for our students as it relates to the new science TEKS and the new End-of-Course exams. The changes from the state have included new pre-requisites, new rigor and conceptual content, and higher level mathematical skills for certain courses. Rearranging the courses will give our student the best opportunity for success in their progression of studying the science disciplines.

### New Course - Partner PE:

The goals of the Partner PE course are (1) to meet the physical education requirement for the students with disabilities in an environment of support and partnership, to increase their social skills, create friendships, and build self esteem, and (2) to meet the physical education requirement for the students without disabilities, to develop leadership skills, to learn how to interact and develop respect and empathy for their peers with disabilities, and to understand from first-hand experience expectations for careers working with individuals with special needs. This course will help promote an inclusive, less restrictive campus environment, and the friendships formed would demonstrate school unity and acceptance.

### New Course - AP Comparative Government and Politics:

This course will not only offer the AP rigor and standards to the students, but it will also be one of the most relevant courses they will have the opportunity to take. A former Director of the World Bank speaking at an AP conference last year stated that of all the AP courses a student should be taking, they should enroll in AP Comparative Government and Politics. He felt that as we live in an increasingly globalized world, students needed to be involved in learning within a global perspective. Currently, only

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15,000 students in the nation are taking the AP Comparative Government and Politics exam. Participation in this course will undoubtedly distinguish our students from others applying to the same universities and colleges.

## **Other Options**

It is recommended that the Board approve the following changes to the high school course offerings for 2010-2011: (1) the re-sequencing of the science courses, (2) the addition of *Partner PE*, and (3) the addition of *AP Comparative Government and Politics*. The Board has the option of approving all or part of the recommendations.