# WEBSTER GROVES SCHOOL DISTRICT BOARD OF EDUCATION ITEM OF CONSIDERATION

DATE: December 5, 2016

#### TOPIC/PROPOSAL:

Approval of revised High School course offerings for 2017-2018

#### BACKGROUND INFORMATION:

DESE requires that high school course offerings be approved annually. Attached is a listing of the proposed changes in the course offerings for the 2017-2018 school year. Rationales for the addition of specific courses are also included. These changes will enable WGHS to better meet the diverse needs of their student population and will enable them to continue to improve the programming provided for our students.

#### INSTRUCTIONAL IMPACT/RATIONALE:

These revised high school courses will provide a wider selection of courses and better support WGHS in meeting the educational needs of its students.

### CSIP/DISTRICT GOAL ADDRESSED:

- \*All students will be successful in the Webster Groves School District.
- \*Close the achievement gaps and meet AYP for all subgroups by enhancing learning for all. Improve student performance to achieve academic and personal success.

#### FISCAL NOTE:

No increase in FTF.

# ADMINISTRATIVE RECOMMENDATION:

- Action Requested: XInformation: \_\_\_\_
- Proposed Motion for Approval (if applicable):

I move that the Board of Education adopt the revised High School Course Offerings for the 2017-2018 school year.

PREPARED BY: Kristin Denbow			
Motion:			Second:
Board Vote: _	(yes)	(no)	(abstain)(Consent Agenda)

#### **New Courses:**

AP Environmental Science (1 Science Credit)

Android Application Development and Programming 1(.5 Practical Art Credit)

Game Design 2 and C# Programming (1 Practical Art Credit)

Creative Writing II (.5 English Credit)

AP Statistics (1 Math Credit)

Interpersonal Relationships (.5 Practical Art Credit)

Bridge 9 (.5 Elective Credit)

Bridge 10-12 (.5 Elective Credit)

Theater Productions (.5 Fine Art)

Fresh Strings (1 Fine Art Credit)

Introduction to Graphic Design formerly known as Desktop Publishing (.5 Practical Art)

## **Dropped Course:**

Concert Orchestra: due to restructuring of orchestra classes and the addition of Fresh Strings

# **AP Environmental Science**

Credit: 1 Science Credit Open to grades 11-12

Prerequisite: 2 years of Laboratory Science

#### **Description:**

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. Unlike most other introductory-level college science courses, environmental science is offered from a wide variety of departments, including geology, biology, environmental studies, environmental science, chemistry, and geography.

This course will use an interdisciplinary approach to address scientific issues related to our environment. Students will collaborate in problem solving, debate, and deep investigation of the concepts and principles of the discipline. Projects will be conducted in real time using real data and application of the study of human actions on the environment. Class will include traditional textbooks and lectures as well as laboratory multiple times a week. The class will also include outside projects that will be required, including an overnight field study, and local field trips throughout Webster Groves. *Note: This course counts as a weighted grade.* 

#### Rationale:

AP-ES will offer a college level course in the biological sciences. Students need to have completed biology and chemistry with a grade of B or above prior to taking the course in order to access the advanced level of data and information. The course will be a year- long and will have off-site field studies involved. The AP Environmental Science course is an excellent option for any interested student who has completed two years of high school laboratory science — one year of life science and one year of physical science (for example, a year of biology and a year of chemistry). Due to the quantitative analysis that is required in the course, students should also have taken at least one year of Algebra. Because of the prerequisites, AP Environmental Science will usually be taken in either the junior or senior year.

# **Android Application Development and Programming 1**

Credit: 0.5 Practical Art

Prerequisite: Algebra I with a C or better

Open to grades: 9-12

### **Description:**

This course introduces students with little or no programming experience to the fundamental features and essentials necessary to create functional Android mobile applications! Students will be introduced to the multiple stages a programmer works through to take a mobile application concept and produce a usable application that can be bought and sold in the Google App Store. Through classroom instruction and laboratory experience students will develop skills and knowledge in programming including using mathematical operators; order of operations and error handling, data types and variables; using "if" statements, loops, and arrays; creating menus; and drawing lines and shapes and learning to use the Android Development Kit to create real Android applications! With the beginning programmer in mind, this course will introduce students into the world of mobile application development! "*Prior programming background or completion of Computer Programming with Java course is strongly recommended for this course.*"

#### Rationale:

Course enhances existing computer programming curriculum and allows students to produce Android applications for mobile applications.

# Game Design 2 and C# Programming

Credit: 1 Practical Art

Prerequisite: Game Design 1 with a C or better

Open to grades: 9-12

### **Description:**

This course advances students' game development skills to the fundamental features and essential skills necessary to create exciting 3D games! Students will advance their C# language programming skills; examine 3D modeling using AutoDesk Maya 2016 and learn to develop 3D game characters and game terrain; learn how to gather user input; and learn to build 3D games using the Unity game engine. Through classroom instruction and laboratory experience students will continue to develop skills and knowledge in programming including using mathematical operators and control statements; creating custom classes with reusable methods; implementing polymorphism and using arrays to hold game data; drawing unique game characters to match a student-generated storyline, and using Visual Studio and C# to collect data and output sound. This course is designed for those students looking to advance their game development skills from our 2D Game Design course and take their skills to a whole new dimension!

#### Rationale:

Course enhances 1<sup>st</sup> tier Game Design curriculum and allows students to produce 3D computer games while further enhancing computer programming curriculum.

#### **Creative Writing II**

Credit: 0.5 English Credit
Open to grades :10-12

Prerequisite: Creative Writing I

### **Description:**

This semester course is open to student authors who wish to continue to improve their creative writing skills. It is in a workshop format and requires strong self-motivation and organization, as the student determines most of his or her writing assignments. During the course, students compile a portfolio of rewrites, mini-lessons tailored to meet student needs and spark ideas, and many drafts. Mini-lessons will focus on everything from alternative forms of poetry to using research in writing and using personal experience to formatting dialogue. Students will be encouraged to draft in genres of their choice: poetry, fiction, creative non-fiction, screenplay, etc. Stretching the imagination and experimenting with new forms and topics are encouraged. Grades will be based on class participation in freewrites and mini lessons, weekly drafting, and the finalized pieces due at the end of each month. Active participation in the annual school writing festival is strongly encouraged. The final for this course is revising a work and submitting it for publication.

#### Rationale:

Creative Writing II will be designed as a continuation of Creative Writing I. Because of its self-directed nature and focus on creative writing instead of the more formal types emphasized in our traditional English courses, it will give students a place to develop their composition skills in a less prescribed atmosphere. It will also provide a course for students who are quite committed to further developing their creative writing, many of whom now take independent studies for this purpose.

### **AP Statistics**

Credit: 1 Math Credit
Open to Grades: 11-12
Prerequisite: Pre-calculus

#### **Description:**

The full year AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. Students have the potential to earn college credit by taking the AP exam in May. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, and problem solving as they build conceptual understanding. *Note: This course counts as a weighted grade.* 

#### Rationale:

Since some of our students have taken Algebra I as seventh graders, this would be an option for them to take for their 4<sup>th</sup> year of math. (Hon Alg II, Hon Precalc, Calc AP, AP Stats). Additionally, most Business majors in college require students to take a college Stats course, so this would provide them with a preparatory experience.

### <u>Interpersonal Relationships</u>

Credit: 0.5 Practical Art Credit

Grades: 9-12 Prerequisite: None

#### **Description:**

This course will prepare individuals to understand the function of the family and each family member's role. The importance in strong family values, goals, cultures and traditions will be stressed. The students will investigate family dynamics and how they are ever changing in our global society. Families that spend time together are more equip to handle a crisis, if one arises. It allows the individuals to study how heredity and environment play a crucial role in how they develop into the person they become. They will learn how to have healthy interpersonal relationships. Learning to balance all of their responsibilities and maintain a healthy lifestyle will ensure they meet their goals and become productive members of society.

#### Rationale:

Students at Webster Groves High school would benefit from a human relations class due to the fact that everyone is involved in relationships. This class will give students the ability to understand what a healthy relationship looks like and how to avoid an unhealthy relationship. This class will also focus on how to improve communication with a significant other, siblings, and parents. The human relations class will discuss subjects such as bullying, internet safety,

and parent communication. The class will also prepare students for family crisis, when they should arrive.

### **Bridge 9**

Credit: 0.5 elective Prerequisites: none Open to Grade: 9

#### **Course Description:**

This pilot program is designed to strengthen the academic, social, and emotional growth of our students. Through academic support, nontraditional learning experiences, teambuilding, leadership development, community service, and experiential learning students will develop skills needed for success at Webster Groves High School and beyond.

#### Rationale:

The Bridge Course will serve as a pilot for a potential school wide Bridge Program. The future Bridge Course and Bridge Program aim to:

- strengthen morale, sense of belonging, and community.
- support the academic and personal growth of a population with diverse needs.
- allow students and teachers to develop and pursue passions.

### **Bridge 10-12**

Credit: 0.5 elective Prerequisites: none Grade Levels: 10-12

### **Description:**

This pilot program is designed to strengthen the academic, social, and emotional growth of our students. Through academic support, nontraditional learning experiences, teambuilding, leadership development, community service, and experiential learning students will develop skills needed for success at Webster Groves High School and beyond.

#### Rationale:

The Bridge Course will serve as a pilot for a potential school wide Bridge Program. The future Bridge Course and Bridge Program aim to

- strengthen morale, sense of belonging, and community.
- support the academic and personal growth of a population with diverse needs.
- allow students and teachers to develop and pursue passions.
- develop students' self advocacy skills.
- foster a respectful and safe learning environment for all students.

### **Theater Productions**

Credit: 0.5 Fine Art(Drama)
Open to Grades: 11 and 12
Prerequisite: Advanced Drama

### **Description:**

This is a semester long class that builds on all of the information learned in Advanced Drama and expands even further into the areas of acting company, collaborative direction, 501(c)3 nonprofit work, licensing, and production planning and execution. The actors are required to read published work, memorize cuttings, stage various scenes and ultimately perform a full length play for the school and community. It is an extremely active class and daily participation is required.

#### Rationale:

Provides students the opportunity to build on content learned in advanced drama and further deepen production skills.

### **Fresh Strings**

Credit: 1 Credit Fine Art(Music)

Open to Grades: 9

Prerequisite: 1-2 years of playing experience

### **Description:**

This course is designed to acclimate all freshman orchestra students to the WGHS Orchestra Program. Students will study shifting, posture, bow techniques, and vibrato, as well as continuing to learn literature from a variety of composers and styles. Students that were in Hixson Middle School's 8<sup>th</sup> grade orchestra will be automatically enrolled in this class. During their sophomore year, all students will, according to their audition results, be placed in either the Symphonic Orchestra or the Statesmen Silver Strings. If a freshman wishes to be considered for Symphonic or Statesmen Silver Strings, they should seek a letter of recommendation from the 8<sup>th</sup> grade orchestra director, and submit a video of the audition material used by the upperclassmen. There is a uniform requirement for the WGHS Orchestra program, and uniforms are the responsibility of the student. Fundraising opportunities will be discussed in class. This course will give three concerts throughout the year.

#### Rationale:

The rationale for this change is that I found it very beneficial my first year here when it worked out that all but 2 freshmen were in the same orchestra. That particular class are now seniors, and are the largest graduating Orchestra class to date at WGHS. I attribute this to having a common place freshmen year to build their orchestra foundation here at WGHS. I want to offer this to all subsequent classes. Having the freshman class split into three different groups doesn't work well to foster a team environment for that particular class. There are also maturity issues to factor in as well. I feel that freshman, even though they may be great players, are not always mature enough to handle the highest performing group, working with seniors and juniors. I believe most of them need a year to figure out our program before they can filter into the upper groups.