DATE: NOVEMBER 2013
PROPOSED GRADE LEVEL(S): 10-12
GRADING: A - F
PREREQUISITES: Fitness 2, and Instructor Approval

COURSE DESCRIPTION:

The CrossFit course will use CrossFit and CrossFit Kids training guides as the basis and foundation for the course. The CrossFit prescription is “constantly varied, high-intensity, and functional movement.” This is the guiding principal for the workouts.

Students will be taught the CrossFit definition of fitness, the 10 general physical skills, foundational movements, basic nutrition and meal planning, programming and scaling of workouts, and how to peer coach and train. The CrossFit program focuses on neuroendocrine response, developing power, cross-training, practice with functional movements, and the development of successful diet strategies.

GENERAL GOALS/ESSENTIAL QUESTIONS:

CrossFit seeks to improve and train 10 skills of fitness: cardiovascular, stamina, strength, flexibility, power, speed, coordination, agility, accuracy, and balance. The first 4 skills are organic skills, which are simply measurable changes in the body. The next 4 are neurological skills, and the final 2 skills are a mixture of organic and neurological.

Students will learn and apply the CrossFit method, and how it applies to the theoretical hierarchy of development. They will be able to explain how each step is an important foundation for the next step. The hierarchy starts with nutrition and then metabolic conditioning, gymnastics, weightlifting/throwing, and sport.

Students will create SMART goals (Specific, Measurable, Achievable, Relevant, Time-specific) using a SMART goal template and include it in their composite notebook to track, assess, and reflect on their progress and results.

Benchmark-named work-outs and assessments will be used to track and assess progress and performance. Students will track these results in their composite notebook and reflect on their progression through the course.

CCSS READING COMPONENT:

The CrossFit Training Guide is comprehensive and provides an outstanding base of knowledge for the course. The course will also use the CrossFit Kids’ lesson plans and CrossFit Kids curriculum. This will be supplemented with various selected articles on CrossFit, fitness, nutrition, health, weightlifting, and athletic performance. A variety of texts will be used in order to impart knowledge and understanding. The use of diagrams, detailed steps, demonstrations, and video clips will be utilized in order to teach the different components of the class. These informational sources, in addition to teacher led discussions and lectures, will provide the majority of the content knowledge.
**CCSS WRITING COMPONENT:**

Students will each have a composite notebook where they will record the workout and information each day, record their results, and reflect on their performance, as well as take notes on the lectures and lessons in class. There will be student essays, analytical comparisons, and short answer writing assignments where students demonstrate their knowledge and reasoning.

**CCSS SPEAKING AND LISTENING COMPONENTS:**

Peer coaching and teaching will be utilized in order to create a safe learning environment which fosters teamwork and support for every student. Students will work in teams and have partner and team workouts where communication will be critical for success. Students will use coaching cues and encouragement to improve form and technique of their classmates. In addition to coaching peers, students will improve their ability to listen and learn from oral instructions and cues.

Groups will create a video and present it to the class on 1 of the 10 general physical skills. The video will include a description of the physical skill, an explanation of whether the skill is organic, neurological, or both; what exercises to use in order to be more proficient in the skill; and a demonstration of how to correctly perform 1 of those exercises.

**DETAILED UNITS OF INSTRUCTION:**

1. Safety, class procedures, rules and expectations.

2. Introduction to CrossFit
   - Learning the aims, prescription, methodology, implementation, adaptations, and drawing conclusions about the program.

3. Domain-specific Unit
   - Terminology, vocabulary, and acronyms used in CrossFit, Nutrition and Fitness.

4. World Class Fitness in 100 Words
   - CrossFit Definition of Fitness: Work capacity across broad time and modal domains

5. CrossFit’s First Fitness Standard
   - The 10 General Physical Skills: Cardio Vascular and Respiratory Endurance, Coordination, Flexibility, Strength, Agility, Balance, Speed, Power, Accuracy, and Stamina.

6. CrossFit’s Second Fitness Standard
   - Performing well at any and every task imaginable. Strive to keep the training stimulus broad and constantly varied.

7. CrossFit’s Third Fitness Standard
   - The 3 Metabolic Pathways: Phosphagen pathway, Glycolytic pathway, and Oxidative pathway.

8. Nutrition: Lays the molecular foundations for fitness and health
   - Different diets and nutritional plans will be discussed and compared to students’ current diet and common beliefs about nutrition.

9. General Concepts of Anatomy and Physiology for Health and Fitness
   - The basic terminology for human movement and body parts.
10. How to Squat
   - The 23 cues to a sound squat
   - Faults, causes, and therapies

11. The 9 Foundational Movements of CrossFit
   - Squat, front squat, overhead squat, shoulder press, push press, push jerk, deadlift, sumo deadlift high pull, medicine ball clean.

12. Scaling and adjusting workouts
   - How to calculate power
   - How to effectively scale a workout
   - Modifications and alternative exercises

13. Training and Coaching
   - Fundamentals, Virtuosity, and Mastering skills
   - Peer coaching and listening

The units of instruction will not necessarily be taught in a sequential order but will be consistently taught and reinforced in order to assure comprehension. This will be accomplished through a basic structure which will follow the format below.

**70 minute class after attendance and dressing down for PE**

**Whiteboard: 10 minutes**

Describe the work-out: Demonstrate movements, define range of motion, and discuss common problems. Discuss scaling options and alternative exercises or lifts.

**Warm-up: 5-10 minutes**

Must be engaging, can include skill work. The warm-up varies depending on the workout to improve mobility and range of motion for the muscles and joints of the WOD and skill development.

**Skill work: 5-15 minutes**

Specifically focused on learning a new skill or improving technique of a movement used in the WOD (Workout of the Day)

**WOD: (Workout of the Day) 5-20 minutes**

Workouts are designed for all athletes to be able to complete. They can include other challenges such as, mental challenges or games for improved brain function and coordination. Workout is scalable for completion.

**Example WODs:**
1. 3 Rounds: 7 DB Thrusters, 7 push-ups, 15 side to side hops, 7 DB Thrusters, 7 push-ups, 15 side to side hops and 5 shuttle runs.
2. Complete as many rounds in 15 minutes as you can of: 5 pull-ups, 10 burpees, 15 air squats and 400 M run.
Skill Work and clean-up: 5-10 minutes
Sometimes this time will be used to practice a new skill while the students are recovering from their WOD or while some students are still finishing a workout which was round-based rather than time-based. Then the WOD equipment will be put away in order to transition into mobility and stretching work.

Mobility and Stretching: 5 Minutes

Lecture, discussion, review of performance, and recording information in journal: 5 – 15 minutes
On shorter school days this format will be modified to incorporate more neurological work and develop speed, agility, coordination, and balance through incorporating tumbling, speed work, and agility drills. Games and play will be incorporated for variance, metabolic conditioning, and fun.

Fridays will be split with a lesson and a shorter work-out. This lesson will typically include an article for reading and response, a video for demonstration, and discussion or time to review their journals and assessments.

TEXTBOOKS AND RESOURCE MATERIALS:
- CrossFit Journal – Free and online for download
- CrossFit Kids Lesson Plans – For Cost
- Fitness and nutrition articles – Free and online or published
- YouTube – Free videos ranging from proper technique to nutrition

COMMON CORE STANDARDS TO BE ADDRESSED:
Below each Common Core Standard an example of how the CrossFit course will improve the knowledge, skills, and reasoning abilities of the students and the real products they are creating to demonstrate their understanding has been given.

College and Career Readiness Anchor Standards for Reading
ELA Standards for Science and Technical Subjects grades 9-10
CCSS.ELA-Literacy.RST.9-10.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.
  ○ Students will be reading and analyzing articles on fitness and nutrition and then articulating the information in a summary of understanding.

CCSS.ELA-Literacy.RST.9-10.2 Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
  ○ Students will learn the basics of the metabolic pathways. They will be able to provide an accurate summary of the differences between phosphagen, glycolytic, and oxidative and contrast the differences between each.

CCSS.ELA-Literacy.RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.
  ○ The Foundational Movements of CrossFit and functional and complex in nature. For example, the air squat without weight has 23 cues to correct a fault or reinforce good form. Students will need to be able to learn, internalize and demonstrate their ability to perform technical tasks.
Craft and Structure

CCSS.ELA-Literacy.RST.9-10.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

- CrossFit, Fitness, and Nutrition essentially have their own language of acronyms and scientific names that are used for communication. Students will learn what EMOM, Specificity, high-glycemic carbohydrates, neuroendocrine adaptation, KTM, ATP, and power means in the context of CrossFit and scientific articles.

CCSS.ELA-Literacy.RST.9-10.5 Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).

- Through learning and teaching about the 10 general physical skills, students will understand the relationship between for example, strength and power. Strength is the ability to apply force while power is the ability to apply force in a minimum of time. Average Power = (Force * Distance)/Time. Understanding these relationships and then applying them to timed workouts and generating the learned understanding that power is infinitely more useful than strength is powerful. This relationship is then applied to workouts to scale them for different students.

CCSS.ELA-Literacy.RST.9-10.6 Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.

- Students will compare nutrition plans and diets and write an analysis of their opinions; the practicality and relevance of the author’s information; and what they have learned and will apply to their diets in the future.

Integration of Knowledge and Ideas

CCSS.ELA-Literacy.RST.9-10.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

- Students will complete a pre-mid-post assessment of performance on about 10 benchmark exercises in their composite notebooks. They will use the pre CrossFit data to help set SMART goals and then they will use the midterm and end of term benchmark data to analyze their success in improving their fitness and reaching their goals.

CCSS.ELA-Literacy.RST.9-10.9 Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

- Students will be encouraged to use the CrossFit Journal, the internet, YouTube, the teacher, and each other as sources for information to improve their knowledge and skill and to reinforce or correct previous explanations or information.

Range of Reading and Level of Text Complexity

CCSS.ELA-Literacy.RST.9-10.10 By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.

- Students will be able to read and understand the CrossFit Journal as well as other fitness and nutritional articles and a complex level.
College and Career Readiness Anchor Standards for Reading
ELA Standards for Science and Technical Subjects grades 9-10

CCSS.ELA-Literacy.WHST.9-10.1 Write arguments focused on discipline-specific content.
  ○ Students will write an argument in essay format comparing two different diets and draw conclusions based on research of the positives and negatives as well as their effectiveness in achieving their stated goals.

CCSS.ELA-Literacy.WHST.9-10.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
  ○ Students will be keeping a daily log of the workout; whether they scaled the workout for themselves, their performance; and anything notable during the warm-up, work-out, and mobility work.

Production and Distribution of Writing

CCSS.ELA-Literacy.WHST.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.
  ○ Students will write a script using a storyboard, shoot their video and edit it using editing software and then upload it to YouTube or download it to a DVD and then present it to the class. They will link their video with sources and other places to find more information.

Research to Build and Present Knowledge

CCSS.ELA-Literacy.WHST.9-10.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
  ○ Students will essentially be the research subject in their composition notebook by tracking their performance on benchmarks and workouts as well as observations on their diet and lifestyle choices and how those choices impact performance from a fitness perspective. Their research project will culminate in the comparison of where they started the class and their progression and achievement or failure in reaching their goals.

Range of Writing

CCSS.ELA-Literacy.WHST.9-10.10 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
  ○ Students will be writing every day for very short periods to enter information, results and to reflect. They will have assignments where they will be writing for longer periods and for different purposes.
Physical Education Model Content Standards for California Public Schools
Course 3F: Weight Training and Fitness

STANDARD 1: Students demonstrate knowledge of and competency in motor skills, movement patterns, and strategies needed to perform a variety of physical activities.

1.2 Observe and analyze the lifting techniques of another person (or oneself through video) and write an analysis of the performance.

1.3 Demonstrate proper spotting techniques for all lifts and exercises that require spotting.

1.4 Observe and analyze the techniques of another person (or oneself through video) performing a plyometric exercise and write an analysis of the performance.

1.5 Measure and assess multiple performances of another person in the following areas: balance, reaction time, agility, coordination, power, and speed.

1.6 Identify and apply the principles of biomechanics necessary for the safe and successful performance of weight training.

1.7 List the safety equipment required for participation in weight training; describe and demonstrate the use of such equipment.

1.8 Demonstrate independent learning of movement skills in weight training.

Standard 2: Students achieve a level of physical fitness for health and performance while demonstrating knowledge of fitness concepts, principles, and strategies.

2.1 Establish a set of personal physical fitness goals, using the principles of training, and create a strength-training and conditioning program.

2.2 Identify the prime mover muscles, antagonistic muscles, and stabilizer muscles for each of the major weight-training exercises.

2.3 Assess multiple performances of another person in the following areas: muscular strength, muscular endurance, cardio respiratory endurance, and flexibility.

2.6 Demonstrate and explain the concepts of two different conditioning programs.

2.7 Develop and use a personal physical fitness log to record all workout data on a daily basis.

2.8 Meet increasingly higher levels of speed, strength, power, and endurance.

2.9 Meet physical fitness standards that exceed those of scientifically based health-related fitness assessments.

Standard 3: Students demonstrate knowledge of psychological and sociological concepts, principles, and strategies that apply to the learning and performance of physical activity.

Self-Responsibility

3.1 Display safe and responsible behavior while training.

3.2 Describe the role of motivation in physical activity.

3.3 Describe how the perception of effort and quality is a personal assessment and describe the role that perception plays in achieving fitness goals.

3.4 Develop personal goals to improve performance in weight training and fitness.

3.5 Identify and analyze weight-training and fitness activities that enhance personal enjoyment.

3.6 Evaluate the risks and safety factors that may affect participation in weight training and fitness throughout a lifetime.
Social Interaction
3.7 Explain how to select and modify weight-training and fitness activities to allow for participation by younger children, the elderly, and individuals with special needs.
3.8 Analyze the role of social interaction in the successful participation in and enjoyment of weight-training and fitness activities.

Group Dynamics
3.9 Assist others in the achievement of their fitness goals.

LAB FEE IF REQUIRED: None

DISTRICT ESLRs TO BE ADDRESSED:

Students will be:

- **Self Directed Learners:** Although the class and team concept will be emphasized for support and encouragement, this class will be rigorous and challenging and students will need to be able to continually face challenges and obstacles with conviction. One of the most important lessons they will learn in this class is an improved work ethic that will benefit them in all of their future endeavors. The SMART goal setting work will assist in creating self directed learners who are driven by a task and desired result.

- **Effective Communicators:** Through written, oral, and video communication, students will develop their communication skills. Peer coaching will also be taught and utilized to help students to shift their communication skillset from learning to being able to use cues and encouragement to elicit desired changes in other students’ performance and practice.

- **Quality Producers/Performers:** Students will be assessed in various ways and they will be producing and performing every day. From their daily workouts, journal entries, written tests, and finally video production, each assignment in this class is designed to provide value for the students.

- **Constructive Thinkers:** The comparison and contrasting of different schools of thought on conditioning, weightlifting and nutrition will provide an impressive collection of texts for analysis and debate. Students will be challenged to have an open mind to consider maybe the way they have always been taught is not the best way and to avoid always regarding an article as absolute truth.

- **Collaborative Workers:** As a result of large classes in physical education and the size of the weight room, the class will need to be structured in a creative and efficient way to maximize students’ time and to improve efficiency. Students will be working in groups of 3-5 and collaborating on proper form and technique as well as encouraging each other while spotting and ensuring the safety of other students.

- **Responsible Citizens:** Students will leave the CrossFit class with an appreciation of health and fitness. They will be empowered to impact their fellow students, relatives, and acquaintances about the importance of living a healthy lifestyle. They will be able to develop and implement effective workout plans and help people use proper technique to ensure power development and prevent injury. They will also be able to promote smart nutrition choices and articulate why proper nutrition is foundational to a healthy lifestyle.