Current courses offered that will be reviewed for new Instructional Materials for the 2016-17 school year.

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Course Number(s)</th>
<th>Sites Currently Offering</th>
<th>Current Text Copyright</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>H701</td>
<td>CHS, EMHS, OHS, VPHS</td>
<td>1995, 2003</td>
</tr>
<tr>
<td>Physiology (H)</td>
<td>S790, S799</td>
<td>CHS, EMHS, OHS, VPHS</td>
<td>2006</td>
</tr>
<tr>
<td>Conceptual Physics</td>
<td>S785</td>
<td>EMHS, OHS, VPHS</td>
<td>using reg Physics text</td>
</tr>
<tr>
<td>Introduction to Statistics</td>
<td>N742</td>
<td>CHS, OHS, VPHS</td>
<td>using AP text</td>
</tr>
<tr>
<td>AP English 12: Lit. &amp; Comp.</td>
<td>L996</td>
<td>CHS, EMHS, OHS, VPHS</td>
<td>2009</td>
</tr>
<tr>
<td>AP European History</td>
<td>H986</td>
<td>EMHS, OHS, VPHS</td>
<td>2006</td>
</tr>
<tr>
<td>AP World History</td>
<td>H997</td>
<td>EMHS, OHS, VPHS</td>
<td>2003</td>
</tr>
<tr>
<td>AP Biology</td>
<td>S976</td>
<td>CHS, EMHS, OHS, VPHS</td>
<td>2006</td>
</tr>
<tr>
<td>AP Physics C: Elec. &amp; Mag.</td>
<td>S994</td>
<td>CHS, VPHS</td>
<td>using reg AP text</td>
</tr>
<tr>
<td>AP Computer Science A</td>
<td>N996</td>
<td>EMHS</td>
<td>using online resource</td>
</tr>
</tbody>
</table>

**NOTE:** For course suggestions not included

The History/Social Science Framework is being finalized by the CDE at this time & it is estimated it will be ready for review this Spring so that we can review Instructional Materials beginning in the Fall of 2016.

A pilot of Grades K-8 ELA/ELD is currently being reviewed for the 2016-17 school year & a pilot for Grades 9-12 ELA/ELD will be reviewed the following year.

Upper level Math courses will be reviewed once a decision has been made on the Secondary Mathematics Pilot that is currently running at all sites to ensure that there is a good flow of the curriculum.

The District NGSS *(Next Generation Science Standards)* Committee is currently meeting to review the new Standards & Framework for Science & will make recommendations for implementation.

Please submit the name of a representative from your school site to Cathleen Corella, in the Office of Curriculum & Instruction, for each course and/or subject area above. The representatives will attend meetings & provide feedback in the form of reviewing instructional materials, attending at least one meeting per course, & filling out rating sheets.

*Submission of names to the Office of Curriculum of Instruction required no later than Friday, February 26, 2016*
K-6 ELA/ELD Instructional Materials Pilot

Orange Unified School District
During the 2016–2017 school year, Orange Unified School District will be piloting State Board Adopted English Language Arts and English Language Development Materials that are aligned to the current ELA and ELD standards, in selected K–6 classrooms.
What are the programs being piloted?

Programs to be piloted are Benchmark Advance and McGraw Hill Wonders

Strong Features of Both Programs

Foundational Skills

Digital Pieces

Well supported integrated and designated ELD

Various support pieces

Focus on close reading

Skills taught in context

Digital assessments
How would this pilot work?

- 2 grade levels from every elementary site (one primary, one upper). Also some middle school 6th grade English and ELD teachers will be included.
- Same curriculum used with piloting teachers at a site
- Mixture of grades piloting both materials.
March: Teachers wishing to pilot submit applications with principal approval.

Fall 2016-January 2017: Teachers pilot and attend meetings to discuss curriculum

February 2017: All elementary teachers and 6th grade English and ELD teachers meet by grade level or grade level spans to learn about the piloting teachers’ experiences with the materials. Materials available for teachers to review.

February 2017: Presentations to parent groups such as Curriculum Council, DELAC, DAC, GATE CAC, Special Ed CAC, to share piloting teachers’ experiences and to gather their input

February/March 2017: Recommendation of Adoption to School Board
Questions or Feedback:
Next Generation Science Standards Update

LISA GREEN, JULIE RONEY, LAURA KRESL
NGSS Committee

- Lisa Green (Administrator-K-12 Academic Content & Design)
- Julie Roney (TOSA-STEM/Science)
- Laura Kresl (TOSA-STEM & Arts Integration)
- Laura Herbert (Instructional Specialist-P21 Pathways)
- Kathy Boyd (Coordinator-CTE/STEM)
- Joe Erven (Principal-McPherson Magnet)
- Suena Chang (Assistant Principal-Canyon HS)
- Nick Sepulveda (Science Teacher-Yorba MS)
- Sharon Cecchi (Elementary Teacher/STEM Lead- Crescent Elementary)
- Judy Fusco (Science Teacher-Villa Park HS)
State Timeline

2013-State adopts Next Generation Science Standards
2016-California Science Framework (Currently in draft form)
2017-Pilot Item/Item Tryout Assessment
2018-Instructional Materials Adoption by SBE; Assessment Field Test
2019-Operational NGSS Science Assessments
Next Generation Science Standards (NGSS)

- K-12 Science Standards
- Developed through a collaborative, state-led process
  - K-12 teachers, state science and policy staff, higher education faculty, scientists, engineers, cognitive scientists, and business leaders
- Designed to provide all students an internationally benchmarked science education

https://www.youtube.com/watch?v=fUzjILfGAN8&noredirect=1
Next Generation Science Standards (NGSS)

Vision of the standards is that by the end of 12th grade all students should:

- Develop some appreciation of the beauty and wonder of science.
- Possess sufficient knowledge of science and engineering to engage in public discussions on related issues.
- Be careful consumers of scientific and technological information related to their everyday lives.
- Be able to continue to learn about science outside school.
- Have the skills to enter careers of their choice, including (but not limited to) careers in science, engineering, and technology.

“Like learning to ride a bike or play music, the experience of doing science is far more important than just reading about it in a book.”

Conceptual Shifts of NGSS

The NGSS promote a new way of teaching and learning that allows students to actively do and experience science in a deep, meaningful way, not just learn about it from a textbook or a lecture. The standards accomplish this by integrating three dimensions of learning:

◦ **Science disciplinary core ideas** (the content, for example, biology);
◦ **Major practices** (how science is conducted in the real world, such as through planning and carrying out investigations); and
◦ **Crosscutting concepts** (science ideas, like *cause and effect*, that permeate all the sciences).

Conceptual Shifts of NGSS

- Reflect the interconnected nature of science as it is practiced and experienced in the real world
- Student performance expectations – NOT curriculum
- Build coherently from K–12
- Focus on deeper understanding of content as well as application of content
- Science and engineering are integrated
- Designed to prepare students for college, career, and citizenship
- NGSS and State Standards (ELA and Mathematics) are aligned
Course Models

APPENDIX K OF THE NEXT GENERATION SCIENCE STANDARDS
CHAPTERS 6 AND 7 OF THE DRAFT SCIENCE FRAMEWORK FOR CALIFORNIA PUBLIC SCHOOLS
NGSS Middle School Models

PREFERRED INTEGRATED PROGRESSIONS:
- Earth/Space Science
- Life Science
- Physical Science

6th-8th Grade: Earth/Space Science, Life Science, Physical Science

DISCIPLINE SPECIFIC:
- 6th Grade: Earth/Space Science
- 7th Grade: Life Science
- 8th Grade: Physical Science
High School Models

3 COURSE

Living Earth
{Integrating Biology & Earth/Space Science}

Chemistry of the Earth System
{Integrating Chemistry & Earth/Space Science}

Physics in the Universe
{Integrating Physics & Earth/Space Science}

4 COURSE

Biology

Chemistry

Physics

Earth/Space Science
Plan for Gathering Stakeholder Feedback

**Stakeholders:** teachers, parents/community members, students, colleges, administrators

**Teacher Feedback Process**

- Teacher Site Leads at each Middle School/High School
- Teacher Site Leads have attended 2 trainings facilitated by the NGSS Committee
- Charged with bringing information back to school site science team
- NGSS Haiku Class accessible to all OUSD science teachers
  - Includes all relevant content/resources regarding NGSS
- NGSS survey will be distributed to all science teachers by the site administrator
Plan for Gathering Stakeholder Feedback

Parent/Community Process
- Presentations to and feedback from different district community committees
  - Follow-Up Q & A Session at District Office

Student Process
- Teacher-led focus groups

Follow-Up
- NGSS Committee synthesis of stakeholder feedback
Conclusion

- A strong foundation in science, technology, engineering, and mathematics (STEM) will put your child on the road to success in school and beyond.
- Important critical-thinking skills will cultivate the great thinkers and innovators of tomorrow and promote a better educated public.
- The time has come to make a change and help all students develop a scientific way of thinking that will prepare them to be informed citizens and ready for college and careers.
- The Next Generation Science Standards (NGSS) focus on the big ideas in science and emphasizes the common practices that scientists use every day, such as planning investigations, developing models, and designing solutions.
- The NGSS encourage students to learn the processes of science in a deep, meaningful way through first hand investigative experiences, instead of just memorizing facts for a test. This scientific way of thinking will ensure that the concepts children learn in school will stay with them not just for a day, a week, or a year—but for a lifetime.
21st Annual
EXHIBITION OF THE ARTS

FRIDAY, MAY 20, 2016 | RECEPTION 4:00—6:00 PM

EVERY PICTURE TELLS A STORY