

EASTERN SCHOOL DISTRICTCourse Description

(June 2, 2006)

Course: Science 3200**Subject Area:** Science**Text:** Science 10: Concepts and Connections (Nelson)
Science 10: Student Record of Learning (purchased separately)**Description:**

This course is a one-year activity-based course that attempts to aid in the development of students who are academically weak and those who are underachieving. This course follows Science 2200, and focuses on topics in both introductory Physics and Chemistry. Science 3200 continues to emphasize the basic science underlying everyday phenomena and the activity-oriented approach to learning science. Core Activities provide opportunity for students to develop practical laboratory skills and to engage in scientific process. STSE (Science, Technology, Society, and Environment) Modules provide students with opportunity to go beyond the “facts” to examine how science permeates our everyday lives. Throughout their study of the topics in Science 3200, students are provided with ample opportunity to develop their scientific literacy by engaging in the process of Inquiry, Problem Solving, and Decision Making.

Unit 1 Chemical Reactions (60 Hours)**Unit 2 Motion and its Applications (60 Hours)****These Units contain 13 Core Activities and 11 STSE Modules****Sequence:**

It is recommended that these units be covered in this sequence to facilitate situations where students transfer from one school to another.

Evaluation Guidelines:

For General Science 3200, the evaluation system must include both Formative and Summative components. *Formative* evaluation is used to find specific weaknesses and strengths, give feedback to student about their strengths and weaknesses, motivate students, and to allow teachers to modify instruction and thereby improve the learning process. *Summative* evaluation is used for the purposes of grading, certifying, and promoting students. Primarily, these are designed to test students' basic knowledge of content, their understanding and ability to apply content, and ability to synthesize and problem solve (higher thinking skills) with respect to the content.

Summative evaluation of students in science courses must involve a variety of evaluation instruments. **Comprehensive unit tests**, along with **quizzes**, are traditional instruments which must be a part of any summative student evaluation scheme. As well, **Performance Assessment** instruments shall be used for a portion of the summative evaluation.

Unit Tests/Quizzes:

All unit tests are based on the learning outcomes of the course and the objectives. The tests include a variety of testing techniques such as multiple choice and essay items. There is at least one test after each unit and sometimes the unit can be broken into several sections for the purpose of testing if the teacher deems it necessary. Each test is designed for completion in a single class period.

Performance Assessment:

Performance assessment instruments shall be used for a portion of the summative evaluation. *Examples of performance assessment instruments are assignments, written homework, science fair, class observations, science projects, laboratory reports, in-class presentation, in-class cooperative education, practical laboratory tests, observation checklist, computer assisted evaluation and teacher-student interviews, research reports, field trip reports, portfolios, etc.*

Teachers can determine the performance assessment instruments used in Science 3200. However, a variety of instruments shall be used to accurately assess students' understanding of learning outcomes, with a focus on core labs and STSE topics.

Weighting of Evaluation Component:

Unit Tests/Quizzes	40%
Performance Assessment	60%

Notes:

- 1) Laboratory Activities must account for 15% of Performance Assessment.
- 2) Student Portfolio must account for 20% of Performance Assessment.
- 3) Student grades for the November reporting period comprised of results obtained from tests/quizzes (40%) and Performance Assessment (60%).