

4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
5. Describe the bonding in and the shape of simple molecules and ions.
6. Solve stoichiometric problems.
7. Write chemical formulas.
8. Write and balance equations.
9. Use the rules of nomenclature to name chemical compounds.
10. Define the types and characteristics of chemical reactions.
11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
12. Determine the role of energy in physical changes and chemical reactions.
13. Convert units of measure and demonstrate dimensional analysis skills.

In this example, the 10-digit approval number is 40.0501.52 03. The first six digits of the approval number indicate subject matter and are based upon current CIP codes. Coordinating Board staff assign the last four digits. The seventh and eighth digits further delineate course content, sequence, or approval category. The ninth and tenth digits indicate the funding category.

The CIP for General Chemistry is 40.0501.

52 is the code for the content listed in the course description. The range for these numbers is typically 51 to 59. However, if a course is approved as a unique need course, the seventh digit will be a 7 instead of a 5. If the course is approved for excessive credit and/or contact hours (more than allowed in the approved listing), the seventh digit will be an 8 instead of a 5.

03 is the current state funding code for biology and physical sciences in public community and technical colleges. These codes range from 01 to 26.

A complete listing of the academic funding codes is contained in Appendix B.

After the Approval Number the maximum semester credit hours per student, semester credit hours (SCH) per course, and contact hours per course are listed:

3 is the maximum number of semester credit hours per student for courses applicable toward an associate degree under this specific approval number. In this example, a college may allow students to take three SCHs of general chemistry courses and count them toward an associate degree.

3 is the maximum number of semester credit hours per course under this specific approval number. A college could offer a course under this approval number for three or fewer SCH, but not more. The college should award the SCH in proportion to the number of contact hours and type of instruction under the assigned common course number.

A traditional course offered for 48 contact hours of lecture over a 16-week semester will earn three semester credit hours and carry a 3 in the second digit of the common course number. Similarly, a traditional lecture/lab course offered for 48 contact hours of lecture and 32 contact hours of laboratory over a 16-week semester would earn four semester credit hours and carry a 4 in the second digit of the common course number. In general, one semester credit hour is awarded per 16 contact hours of lecture instruction and one semester credit hour is awarded per 32 to 48 contact hours of laboratory instruction.

48 is the maximum number of contact hours per course according to this specific approval number. Thus, a college can offer a course under the General Chemistry approval number