# Georgia Standards of Excellence
## High School Curriculum Map
### Course Title: IB Chemistry SL
### District Abbreviation: SCI505-506SL
### State ID: 40.05501

## First Semester

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
<th>Unit 7</th>
<th>Unit 8</th>
<th>Unit 9</th>
<th>Unit 10</th>
<th>Unit 11</th>
<th>Unit 12</th>
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<tbody>
<tr>
<td>3 Weeks</td>
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### GSE Standards:
- SC1a-e, g
- SC2a-e
- SC3a-e
- SC4a-c
- SC5a,b
- SC6f-h
- SC5c

### IB Standards:
- 2.1
- 2.2
- 3.1
- 3.2
- 4.1
- 4.2
- 4.3
- 4.4
- 4.5
- 6.1
- 7.1
- 8.1
- 8.2
- 8.3
- 8.4
- 8.5
- 9.1
- 9.2
- 10.1
- 10.2
- 11.1
- 11.2
- 11.3

### Learning Intentions:

### Topical Focus:
- Nuclear atom
- Configuration
- Periodic table
- Trends
- Ionic bonding & structure
- Covalent bonding & structure
- Intermol
- Particulate nature of matter
- Chemical change
- Mole concept
- Collision theory
- Rates of reaction
- Equilibrium
- Effects on equilibrium
- Theories of acids & bases
- Properties of pH
- Energy cycles
- Entropy
- Spontaneity
- Oxidation
- Reduction
- Functional groups
- Uncertainty
- Error
- Graphical techniques
- Spectroscopy
- A:Materials
- B:Biochemistry
- C:Energy
- D:Medicinal Chemistry
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<thead>
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<tbody>
<tr>
<td>proton</td>
<td>group</td>
<td>anion</td>
<td>homo/heterogeneous</td>
<td>rate of reaction</td>
<td>Bronstead-Lowry</td>
<td>temperature</td>
<td>reduction</td>
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<td>oxidizing &amp; reduction</td>
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<td>e cloud</td>
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<td>molar mass</td>
<td>catalyst</td>
<td>standard state</td>
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<tr>
<td>nuclear notation</td>
<td>metalloid</td>
<td>covalent bond</td>
<td>empirical formula</td>
<td>equilibrium, equilibrium constant, reaction quotient</td>
<td>specific heat</td>
<td>unsaturated</td>
<td>aromatic structures</td>
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<tr>
<td>isotope</td>
<td>trends</td>
<td>bond strength &amp; polarity</td>
<td>molecular formula</td>
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<td>Hess’ Law</td>
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<td>alkenes</td>
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<tr>
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<td>Lewis structure</td>
<td>limiting &amp; excess reactants</td>
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<td>cathode</td>
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<td>halogeno-alkanes</td>
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<td>Avogadro’s Law</td>
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<td>ideal gas</td>
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<td>acid deposition</td>
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<td>Molar solution</td>
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<td>standard solution</td>
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<td>PNMRS</td>
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Reading Selections/Extensions:
### Each unit integrates laboratory experiences and field work using the process of inquiry.

There are several strategies that are common throughout the units such as the use of a laboratory notebook, written lab reports, common teaching strategies, and written assignments relative to technical and seminal documents. Lab safety is stressed in all practical situations. Many standards are recursive in nature and will be revisited in different units throughout the year. The Practical Scheme of Work category (40 hours) is addressed throughout the year in practical activities, internal assessment, and group 4 project.

#### Resources

www.georgiastandards.org