Development of Modern Chemistry: From Thales to Mendeleev

Objective: To study the historical development of modern chemistry, primarily from a scientific (intellectual) perspective but also in light of cultural, political, and economic factors. The course will span the period beginning with the emergence of natural philosophy in Ancient Greece and end with modern structural ideas in the early 20th Century. The course will focus on the period from the late 17th to early 19th Century, during which a drastic shift from alchemical ideas to more modern chemical concepts occurred.

Instructor: Dr. J. Aldstadt
Office: CHEM 112  aldstadt@uwm.edu
Office Hours: TBD

Class Schedule: TR 12:30-1:45 pm (HON 190)

Pre-requisite: None

Texts (required):


Selections from the following will also be studied (provided by the Instructor):
Plato’s Timaeus, Aristotle’s Physics and Meteorologica, Lucretius’ On the Nature of Things, Geber’s The Sum of the Height of Perfection, Boyle’s The Sceptical Chymist, Black’s On Magnesia Alba, and Lavoisier’s Elements of Chemistry. Additional readings will include select writings of Priestley, Dalton, Cannizzaro, Mendeleev, & others.

Academic Dishonesty. Academic dishonesty will not be tolerated. Cheating will result in a course grade of F — referral to the University Judiciaries may also occur. The University’s policies are described in UWS Chapter 14 and Faculty Document No. 1686 and can be found at: uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct.
Attendance. You are responsible for all material presented in class.

_Note: if you will need accommodations to meet the requirements of this course, contact me as soon as possible._

**Course Structure.** The course grade will be determined from the following elements:

<table>
<thead>
<tr>
<th>Element</th>
<th>Percentage</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Formal Essays</td>
<td>50%</td>
<td>four formal essays at approx. three-week intervals</td>
</tr>
<tr>
<td>Exploratory Writing</td>
<td>25%</td>
<td>short, informal in-class exercises on an approx. weekly basis</td>
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<tr>
<td>Engagement</td>
<td>25%</td>
<td>the extent of your participation in discussions</td>
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