CHE 621: Independent Study

**Professor:** Dr. Patrick Lackey  
**Office:** Hoyt 363  
**Email:** lackeyp@westminster.edu  
**Phone:** 724-946-7295  
**Office hours:** Consult posted schedule on office door, by drop-in, and by appointment.

**Course Description:** This course is designed to develop and improve the research skills of the students enrolled. Each student enrolled will conduct an independent research project.

**Objectives**
- Each student will develop a research question.
- Each student will create an experimental plan, including safety considerations and waste disposal.
- Each student will collect her/his own data.
- Each student will analyze her/his own data.
- Each student will prepare a formal report, using ACS style, detailing her/his results and conclusions at the end of each semester.
- Each student will spend at least 2 - 3 hours per week conducting research for each credit earned.
- Each student will meet weekly with Dr. Smith to discuss her/his progress on the project.
- Each student will frequently consult with Dr. Lackey to discuss the direction of the project and to troubleshoot, as needed.

**Academic Integrity**
The College's Academic Integrity Policy (AIP) will be strongly enforced. Violations of the AIP include cheating, misconduct, plagiarism, and providing false information. Academic dishonesty will not be tolerated. The first citation for academic dishonesty will result in a failing grade for the course. All citations for academic dishonesty will be reported to the Dean of the College, in accordance with college policy. Details of the AIP can be found in the Westminster College Undergraduate Catalog.

**Grading System**

<table>
<thead>
<tr>
<th>If the student meets this criteria</th>
<th>They will earn an</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory completion all objectives by end of semester</td>
<td>A</td>
</tr>
<tr>
<td>Unsatisfactory completion of any one of the objectives</td>
<td>B</td>
</tr>
<tr>
<td>Unsatisfactory completion of any two of the objectives</td>
<td>C</td>
</tr>
<tr>
<td>Unsatisfactory completion of three or more objectives</td>
<td>F</td>
</tr>
</tbody>
</table>

*The +/- designation may be used if the student produces a variation of the criteria, as determined by the professor*