Chemistry 103L Syllabus, Fall 2019

Instructor: J. Molloy  Info: ISC Rm 2031, ext. 12546; jcmolloy@wm.edu; office hours TBA

Laboratory Instructors: Bebout, Landino/Young, Thorsen, Wustholz

Lab T.A. ______________

Laboratory Coordinators: Ms. Shieh (ISC Rm 1059, ext. 12678);
Mrs. Hopkins (ISC Rm 1037, ext. 12543)

Chem 103L/103 is a cognate lab/lecture courses.

Objectives: Laboratory techniques in chemistry; applications of chemical fundamentals

Safety: Everyone is responsible for safe practices in the laboratory. Students must wear approved goggles in the laboratory. Safety training and a written agreement must be completed before students are allowed in the laboratory (5% of grade, below).

Instructors, at their discretion, can lend goggles at a 10% grade penalty for the experiment.

Grading: Experiments: 50% Final: 20% Safety Training: 5%
Discussion Grades: 5% Lab Quizzes: 20%

A: 100-95, A-: 94-90, B+: 89-87, B: 86-83, B-: 82-80, C+: 79-77, C: 76-73, C-: 72-70, D+: 69-67, D: 66-63, D-: 62-60, F < 60

Course Structure
An online pre-lab discussion precedes the laboratory experiment itself and is required before attending. You must attend the lab as you registered (no section-hopping) except with express permission.

Schedule of Discussions and Experiments

<table>
<thead>
<tr>
<th>Experiment date</th>
<th>Exp. #</th>
<th>Experiment</th>
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<tbody>
<tr>
<td>Sept. 4,5</td>
<td>1</td>
<td>Measurements &amp; Calculations; also Appendix A</td>
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<tr>
<td>Sept. 11,12</td>
<td>2</td>
<td>Data Analysis and Graphing</td>
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<td>Sept. 18,19</td>
<td>3</td>
<td>Estimation of Avogadro’s Number</td>
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<td>Sept. 25,26</td>
<td>4</td>
<td>Absorption Spectrophotometry</td>
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<td>Oct. 2,3</td>
<td>5</td>
<td>Mass Relationships in Chemical Reactions</td>
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<td>Oct. 9,10</td>
<td>6</td>
<td>Neutralization Titrations</td>
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<tr>
<td>Oct. 16,17</td>
<td>7</td>
<td>Redox Titrations—Determination of Hydrogen Peroxide</td>
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<tr>
<td>Oct. 23,24</td>
<td>8</td>
<td>Determination of Ascorbic Acid</td>
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<td>Oct. 30,31</td>
<td>9</td>
<td>Enthalpy Measurements and Hess’ Law</td>
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<tr>
<td>Nov. 6,7</td>
<td>10</td>
<td>Some Properties of Gases</td>
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<tr>
<td>Nov. 13,14</td>
<td>11</td>
<td>The Molar Volume of a Gas</td>
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<tr>
<td>Nov. 20,21</td>
<td>12</td>
<td>Photometric Determination of an Equilibrium Constant</td>
</tr>
<tr>
<td>Nov. 27,28</td>
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<td>Happy Thanksgiving!</td>
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</table>

There are no makeup labs; labs may be made up during the week offered on a space available basis, per the excused absence policy; see Ms. Shieh.

Questions about grading, excused absences, and other issues should be directed to J. Molloy.

Final Exam The final examination will be administered during the last laboratory period; Wednesday, Dec. 4 or Thursday, Dec. 5. It is a 90 minute exam.
**Enrollment Deadlines**

- **Add/Drop Deadline**: Friday, September 6, 11:59 pm.
- **Withdraw Deadline**: Monday, October 28, 11:59 pm.

**Special Note for new students:**
New students that were able to enroll in the laboratory without enrollment in Chem 103/205 this summer must be enrolled in Chem 103, Chem 205, or have met the pre-requisites by the Add/Drop deadline. Failure to do so will result in disenrollment from the lab after the Add/Drop Deadline.

**Lab Manuals**
Lab manuals are only available in the William & Mary book store and are required.

Chemical splash goggles are required during lab work. The book store sells chemical splash goggles, but that model of goggle is not required. Other vendors, both local and online, have suitable replacements. Please contact J. Molloy if you have questions on appropriate goggles.

**Office Hours**
Office hours will be announced on Blackboard before the first day of lab.

**Student Accessibility Services**
It is the policy of The College of William & Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any student who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2509 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. Specific discussion may be needed on how qualifying needs impact laboratory activities.

**Diversity & Inclusion Vision Statement**
The College of William & Mary values and actively nurtures an environment of diversity and inclusiveness where every individual, regardless of how we may differ – for example, but not limited to, with regard to race, religion, gender, ethnic origin, age, socioeconomic status, political preferences, physical abilities, or sexual orientation – is embraced, respected, and afforded the same opportunity to grow, to succeed, and to contribute to the William & Mary’s success.

**Honor Code**
All students are expected to follow the W&M Honor Code. For more information, please see:
https://www.wm.edu/offices/deanofstudents/services/communityvalues/honorcodeandcouncils/honor-code/index.php