



MDC Homestead Campus  
Arts & Sciences Department

## CHEMISTRY 1033 LABORATORY

### SYLLABUS

#### **General Information**

CHM1033L is the laboratory portion of CHM1033. Lecture (1033) and Laboratory (1033L) are co-requisites; students must either be enrolled in both courses concurrently or have already successfully completed the lecture portion of the course.

#### **Text Book**

*Laboratory Manual* by Timberlake, 8th edition.

Students are required to **read** the assigned laboratory exercise(s) in the lab manual **before** attending class.

#### **Required Supplies**

Laboratory coat or apron

Safety glasses

Laboratory manual

Notebook

Pen or Pencil

#### **Attendance and Tardiness**

Attendance is REQUIRED. Any student who misses a scheduled laboratory session will be required to withdraw from the course. If the student does not withdraw he/she will automatically fail the course.

Any student arriving to class more than five minutes late will not be allowed to enter and will be considered absent.

#### **Make-up Policy**

There will be NO MAKE-UP EXAMS, except under extenuating circumstances as determined by the instructor; documentation is required. It is the student's responsibility to contact the instructor in this regard. There will be absolutely NO MAKE-UP LABS.

#### **Performance Evaluation**

Students will be assigned a grade based on their performance in the lab. The instructor's grade will be based on the student's ability to follow instructions. Students are expected to:

- follow all safety precautions (*General Safety Rules* can be found on pages vii – x in the lab manual)
- always wear safety goggles
- arrive to lab on time
- read the assigned laboratory exercise(s) in the lab manual before attending class
- clean and return all glassware/equipment to its proper place at the end of the experiment
- clean your work area



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### Grading Policy

Final course grades will be determined based upon the student's performance on the instructor's **performance evaluation, lab worksheets, and exams**. The point distribution will be as follows:

| <b>Task</b>  | <b>Points</b> |
|--|---------------|
| <b>Performance Evaluation</b>  | 80            |
| <b>Lab Worksheet</b>   |               |
| Glassware, Measurements & SF (Exp. 1)                                    | 20            |
| Conversion Factors in Calculations (Exp. 2)                              | 20            |
| Density and Specific Gravity (Exp. 3)                                    | 20            |
| Atomic Structure and Electron Configuration (Exp 4)                      | 20            |
| Atomic Structure and Electron Configuration (Exp 5)                      | 20            |
| Compounds and Formulas (Exp. 7)  | 20            |
| Chemical Reactions and Equations (Exp. 10)                               | 20            |
| Temperature; Heating Curve (Exp. 9 A,C)                                  | 20            |
| Solutions and Electrolytes (Exp. 15 A,B)                                 | 20            |
| Solutions, Colloids, and Suspensions (Exp. 18)                           | 20            |
| Acids; Bases; pH; Buffers (Exp. 19)                                      | 20            |
| Organic Chemistry (alkanes, -enes, -ynes, -aromatics) (Exp. 21)          | 20            |
| Organic Chemistry (alkanes, -enes, -ynes, -aromatics) (Exp. 22)          | 20            |
| Carbohydrates (Exp. 26)  | 20            |
| Carbohydrates (Exp. 27 A,D)  | 20            |
| Proteins; Denaturation (Exp. 37 C,D)                                     | 20            |
| <b>Exams</b>   |               |
| Midterm Exam (Exp. 1, 2, 3, 4, 5, 7, 9 A, 9 C, 10)                       | 300           |
| Final Exam (Exp. 15 A, 15 B, 18, 19, 21, 22, 26, 27 A, 27 D, 37 C, 37 D) | 300           |
| <b>Total</b>   | <b>1000</b>   |

| <u>Letter Grade</u> | <u>Percent</u> | <u>Points Needed</u> |
|---------------------|----------------|----------------------|
| A                   | 90% - 100%     | 900                  |
| B                   | 80% - 89%      | 800                  |
| C                   | 67% - 79%      | 670                  |
| D                   | 57% - 66%      | 570                  |
| F                   | 0% - 56%       | less than 570        |

### Academic Dishonesty Policy:

See Miami Dade College Students Rights and Responsibilities PROCEDURE 4035.



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**SCHEDULE**

| <b>Week</b> | <b>Topic</b>   | <b>Experiment</b>   |
|-------------|--|---------------------|
| 1           | Introduction & Lab Safety                            |                     |
| 2           | Glassware, Measurements & SF                         | 1                   |
| 3           | Conversion Factors in Calculations                   | 2                   |
| 4           | Density and Specific Gravity                         | 3                   |
| 5           | Atomic Structure & Electron Conf.                    | 4 & 5               |
| 6           | Compounds and Formulas                               | 7                   |
| 7           | Chemical RXNs & Equations                            | 10                  |
| 8           | Temperature; Heating Curve                           | 9 A, C              |
| <b>9</b>    | <b>MID-TERM EXAMINATION</b>                          |                     |
| 10          | Solutions & Electrolytes                             | 15 A<br>15 B (DEMO) |
| 11          | Solutions, Colloids, & Suspensions                   | 18                  |
| 12          | Acids; Bases; pH; Buffers                            | 19                  |
| 13          | Organic Chemistry (alkanes, -enes, -ynes, aromatics) | 21 & 22             |
| 14          | Carbohydrates  | 26, 27 A, D         |
| 15          | Proteins; Denaturation                               | 37 C, D             |
| <b>16</b>   | <b>FINAL EXAMINATION</b>                             |                     |