

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u>Chemistry</u>								
<b>COURSE RUBRIC AND NUMBER</b>	<u>CHEM 1204</u>								
<b>COURSE TITLE</b>	<u>Chemical Calculations</u>								
<b>COURSE CREDIT HOURS</b>	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">2</td> <td style="text-align: center; border-bottom: 1px solid black;">2</td> <td style="text-align: center; border-bottom: 1px solid black;">:</td> <td style="text-align: center; border-bottom: 1px solid black;">1</td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td style="text-align: center;">Lab</td> <td></td> </tr> </table>	2	2	:	1	Credits	Lec	Lab	
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Credits	Lec	Lab							

### I. Catalog Description

Studies the mathematical applications used in Chemistry. Designed for introductory science and engineering students. (2:1). Lab fee.

### II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Solve problems in the metric system and English system involving dimensional analysis.
- B. Distinguish between scientific and exponential notation.
- C. Express numbers in proper scientific notation.
- D. Solve problems dealing with density and heat/energy.
- E. Distinguish between atomic and formula weight.
- F. Work problems involving interconversion between moles and grams.
- G. Distinguish between atoms and molecules.
- H. Solve problems relating to atoms and molecules.
- I. Determine percent composition of atoms in compounds.
- J. Obtain empirical formulas from percent.
- K. Distinguish between empirical and molecular formula.
- L. Distinguish between valence and oxidation number.
- M. Write chemical formulas.
- N. Apply the rules for nomenclature of chemical formulas.
- O. Distinguish between covalent and ionic compounds.
- P. Express ionic reactions from molecular reactions.
- Q. Distinguish between reactions types.
- R. Explain the method for balancing chemical equations.
- S. Solve work problems on mole-mole relations, mass-mass relations, and mole-mass concepts.
- T. Distinguish between experimental and theoretical yield.

### III. Evaluation

- A. Challenge Exam  
Students who wish to challenge the course should contact the testing center and the division dean. Challenges must be accomplished before the census cut-off date. Students who previously have received a W or better grade for the course are not eligible to challenge the course.
- B. Post –Assessment
  - 1) The instructor will maintain a continuous record of each students' progress on an institutionally approved grade sheet on computerized substitute. All instructors must keep records in such a way that information would be clear to a second party having to check grade computation in special cases. An explanatory legend should be provided on the grade sheet.

- 2) The evaluation of the exam should be in an objective and reproducible manner. In addition to reading assignments, the instructor will require weekly quizzes on the subject matter.

It is essential that students commit themselves to the assignments throughout the semester.

Number and Types of Examinations: The course will include a minimum of four major written examinations and a final comprehensive examination.

Reading assignments will be given periodically from the assigned textbook.

The following approaches may be involved; however, instructors should stress the possible overlap of these strategies.

1. Process analysis
2. Critical thinking
3. Comparison/contrast
4. Classification
5. Definition
6. Description
7. Causal analysis
8. Analogy
9. Problem/solution

C. Final Examination

A final examination is required in all Chemistry 1204 classes. The exam should consist of all material covered in class during the semester in the scheduled two-hour examination period.

D. Grading Percentages

Grade percentages for determining the course grade may be devised by the individual instructor, but the grade for the final exam should count 25% of the total course grade.

E. Remediation

There will be no remediation. Since the lowest exam grade is dropped, there are no make-up examinations.

F. Grading Scale:

- A = 90 - 100
- B = 80 - 89
- C = 70 - 79
- D = 60 - 69
- F = Below 60
- I = Incomplete
- W = Withdrew or withdrawn

**IV. Disability Statement (American with/Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024)

**V. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.