



# NORTHWEST FLORIDA STATE COLLEGE

## Course Syllabus

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**Course Name: Chemical Science**

**Course Number: CHM1020**

**Section: 10146**

**Credit Hours: 3**

**Instructor Name: Dr. Kurt Teets**

**Instructor Office Location: 350/211 Niceville Campus**

**Instructor Email: teetsk@nwfsc.edu**

### Course Curriculum

This course provides students with an introduction to chemical principles and applications for the nonscience major. Students will engage in problem solving and critical thinking while applying chemical concepts. Topics will include the scientific method of problem solving, classification of matter, atomic theory, the periodic table, gases, chemical reactions, energy, and chemical bonds.

### Goals

*The student will demonstrate an understanding of the scientific method, distinguishing between fact, scientific law, hypotheses, and theory; and recognizing the difference between scientific and non-scientific explanations.*

*The student will interpret data, given in problem form or obtained experimentally, in order to demonstrate problem-solving skills (critical thinking), develop testable explanations, or distinguish the difference between correlation and causation.*

*The student will demonstrate fundamental knowledge of the terminology, major concepts, and theories of at least one field within the physical sciences, and in the biological sciences.*

*The student will relate scientific discoveries and theories to broader areas of human concern.*

### Objectives

Student Learning Outcomes:

- Students will be able to distinguish between physical and chemical properties and changes.
- Students will recognize components of gaseous chemistry.
- Students will recognize components of aqueous chemistry including properties of water, solutions, and acids and bases.
- Students will correlate the design of the periodic table to periodic trends and physical and chemical properties elements.
- Students will write and interpret chemical formula and write balance chemical equations.

## **Student Expectations of the Course**

*Instructor will reply to emails within 48 College business hours*

*Instructor will post and maintain office hours*

*Instructor will provide a schedule of material to be covered on the syllabus*

*Instructor will communicate important information such as exam dates in a timely manner*

*Instructor will maintain updated gradebook in the Canvas LMS*

*Instructor will include a clear grading policy in the syllabus*

*Instructor will include contact information such as their email address and phone number*

*Instructor will return graded work in a timely manner*

*Instructor will post videos in the Canvas LMS on topics covered for students to watch at their leisure*

## **How Student Performance will be Measured**

*The student may be evaluated by the following methods:*

*Periodic exams over lecture material*

*Periodic quizzes*

*Completion of online homework assignments in the Canvas LMS*

*Completion of extra credit quizzes in the Canvas LMS*