



Learning Unit Modules
Focused in Integral Professional Competences

I. GENERAL LEARNING UNIT

1. Identification	2. Code	3. Semester	4. Training área
Organic and Inorganic Chemistry	BQO02	First	Basic

5. Mode					
Compulsory	X	Elective			
Classroom	X	Non-Attendance		Mixed	
Laboratory	X	Field practices		Guided tours	

6. Class shedule (hours per week)				
Theory	Practice	Independent study	Total hours	Credits
2	2	1	5	5

7. Person responsible for the subject.
María Angélica Martell Nevárez

II. DATA SPECIFIC LEARNING UNIT

8. Objectives
Understanding, managing and correctly applying the fundamental topics of chemistry, such as structure of matter, chemical processing and transformations, preparation of solutions, analysis of structures, biomolecules and the main organic and inorganic compounds that interact with the environment and natural resources after employed in any industry.

9. Presentation.
This learning unit is intended to deepen the student's knowledge of chemistry in those acquired in the high school level, supplemented by new ones and to acquire skills that enable subsequent application in their training in engineering to solve forest problems and others that are related to chemistry. Showing respect for their environment by applying professional ethics.



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10. Professional competences to develop in students.			
Trees and bushes constitute structures and applying an efficient use of their parts for human benefit.	Knowing and handling the constitutive structures of trees and bushes, and promoting an efficient use of their parts for human benefit.	Collaboration and participation in team works. Interest in self learning and continuous learning.	Respect Responsibility Commitment

11. Course topics
Unit I: Structure of matter Unit II: Chemical transformation Unit III: Preparation of solutions Unit IV: Analysis of structures Unit V: Biomolecules

12. Evaluation criteria
Formative evaluation Summative assessment Self-evaluation Co-evaluation Hetero-evaluation

13. Information sources
Basic <ul style="list-style-type: none">• Brady, J.E. Química Básica. Principios y Estructura. Editorial Limusa Wiley. 2ª. Ed. México. 2001.• Buttler-Harrod, Química Inorgánica Principios y Aplicaciones, Edit. Adison-Wesley Iberoamericana, México D.F. 1992.• Chang, R., Química. Edit. Mc-Graw Hill. México, 1992.• Cotton y Wilkinsin, Química Inorgánica Básica, Edit. Limusa, 2001.• Ebbing, Química General, Mc Graw Hill, México, D.F. 1997.• Garzon, G. Fundamentos de Química General con Laboratorio. Edit. Mc-Graw Hill. México, 1989.• Garritz, A., Chamizo. J.A. Química. Adisson Wesley Iberoemaricana. México. 1994.• Glen E. Rodgers, Química Inorgánica, Mc Graw Hill 1995.• G.S. Manfu, Principios de Química Inorgánica, Mc Graw Hill. 1983.• Russel, I. Química. Edit. Mc-Graw Hill. México, 1989.• Whitten, K., Gailey K. Química General. Edit. Mc-Graw Hill. México, 1998.



UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO
FACULTY OF FORESTRY SCIENCES
Forestry Sciences Engineering



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Complementary

- Brown, T., Química: La Ciencia Central. 4a edición. Edit. Prentice-Hall. México, 1987.
- Mahan, B. Química: Curso Universitario. 3a edición. Fondo Educativo Interamericano. México, 1990.
- Mortimer, Ch. Química. Grupo edit. Iberoamericana. México, 1983.