**ESSEX COUNTY COLLEGE**

**Course Outline**

**Student Learning Outcomes (SLO) Assessment Summary Sheet**

**Course Prefix & Number**: CHM 104 **Course Title**: General Chemistry II

**Credit Hours**: 4.0 **Contact Hours**: 6.0 **Name of Person Completing this Form**: Emmanuel Aouad

**Type of Course:** (Check **all** that apply.)

Developmental Not required for any program (not a major or additional requirement)/Other

AA program major requirement AS program major requirement AAS program major requirement

(Chemistry program)

AA program additional requirement AS program additional requirement AAS program additional requirement

General Education affirmed course – if so, indicate the foundation category/ies the course is **affirmed** by GECC as addressing:

Written and Oral Communication Humanistic Perspective

Quantitative Knowledge and Skills Historical Perspective

Scientific Knowledge and Reasoning Global and Cultural Awareness of Diversity

Technological Competency/Information Literacy Ethics

Society and Human Behavior

**Student Learning Outcomes (SLOs)**:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Detailed Goal (SLO)** | **Assessment Method** | **Introduction (I) or**  **Mastery (M)**  **of SLO** |
| **Course Goals** | Use mathematical skills proficiently to rearrange equations, determine significant figures, compute and round off numbers, and implement scientific notation. | Blueprinted questions on quizzes and tests and review of laboratory notebooks | N/A |
| Demonstrate knowledge of the basic concepts of chemistry, which are part of the general education required for many professional. | Blueprinted questions on quizzes and tests |
| Utilize critical thinking techniques to reason, listen, follow directions, make observations, and draw conclusions. | Quizzes, Tests, Laboratory activity and report writing. |
| Convert word problems to the appropriate mathematical language and solve them quantitatively. | Quizzes, Tests, Laboratory activity and report writing. |
| Apply proficient laboratory skills. | Quizzes, Tests, Laboratory activity and report writing. |
| **Program Goals\***  (if course is a major requirement) | 1. Goals for Non-Chemistry Majors: |  |  |
| 1. To provide a meaningful understanding of fundamental concepts of Chemistry and how these concepts interface with the functioning of humans and the ecosystem. |  |  |
| 1. To increase the student’s knowledge in the field of Chemistry |  |  |
| 1. To expose the student to laboratory experiments that investigate the scientific phenomena |  |  |
| 1. To familiarize the student with the process of science |  |  |
| 1. To teach techniques such as measurements and use of the periodic table, and |  |  |
| f. To expose students to the use of computers in  research through identifying websites that  objectively present information about the field of  Chemistry. |  |  |
| **Gen Ed Goals\***  (if course is a Gen Ed course) | **Scientific Knowledge and Reasoning**: Students will use the scientific method of inquiry through the acquisition of scientific knowledge. |  | ? |

**\*** addressed by **THIS** specific course