**East Central College Department – Division: Chemistry – Science Division**

**Program Assessment Planning Document Semester & Academic Year: Spring 2013**

**ECC learning objectives** **(general education objectives and CLOs)** **& program objectives** **that this assessment will support**

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| 1. **General Education Objectives**
 | 1. **Common Learning Objectives**
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| 1. Life and Physical Science
 | 1. Creative and critical thinking
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| 1. Higher order thinking
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| 1. Managing information
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|  | 1. **Program objectives** (Unit specific)
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**Unit I and II reports will be submitted as part of the a Program review every 5 years**

1. **Program objectives:**

*a. Describe and apply basic chemical knowledge and concepts*

*b. Understand the scientific method of creating and testing hypotheses.*

*c. Gather and analyze numerical information appropriate including creating and interpretation of graphs and diagrams.*

*d. Apply new understanding of Chemistry and its role in society*

*e. Demonstrate appropriate technical skills related to Chemistry*

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| Target Courses | Objectives met  | Assessment Tool | Assessment Cycle  |
| **Intro Chemistry** (CH 1105) | I.a - I.d  | Semester exams, laboratory exams & reports, Presentation/Research Paper | Semester of course offering, with reporting every two years |
| II. a  | CAAP  | To be determined by the college. |
| III. a - III.e. | American Chemical Society(ACS)Departmental Pre-test and post-test. | PeriodicallySemester of course offering, with reporting every two years |
| **Intro to Forensic Chemistry**(CH 1013) | I.a, I.b, & I.c | Semester exams , forensic case study  | Semester of course offering |
| II. a | CAAP test | To be determined by the college. |
| III.a- III. e | departmental pre-test and post-test | Semester of course offering, with reporting every two years |
| **General** **Chemistry I** (CH 1305) | Refer to Unit II | Refer to Unit II | Refer to Unit II |

 ***Unit II*: Majors Courses**

1. **Program objectives:**

**a. Acquire core factual knowledge of chemistry**

**b. Develop core experimental abilities**

**c. Develop conceptual understanding of the basic principles and theories of chemistry**

**d. Apply problem solving skills in lecture and laboratory environments using knowledge, experimental techniques and safety considerations**

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| Target Courses | Objectives met  | Assessment Tool | Assessment cycle |
| **General Chemistry I** (CH 1305) | I. a, I. b & I. d | Semester exams, laboratory exams & laboratory reports | Every semester the course is offered |
| II.a | CAAP test | To be determined by the college. |
| III.a – III.d | American chemical society (ACS) Pre-test and post-test | Every semester the course is offered, with reporting every two years |
| **General Chemistry II** (CH 1405) | II.a | CAAP test | To be determined by the college. |
| III.a – III.d | a. Semester exams, laboratory exam, laboratory reports ,b. Presentation/Research Paperc. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered, with reporting every two years. |
| **Organic Chemistry I** (CH 2305) | II.a | CAAP test | To be determined by the college. |
| III.a – III.d | a. Semester exams, laboratory exam, laboratory reports,b. Design laboratory experimentsc. Presentation/Research Paperd. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered, with reporting every two years |
| **Organic Chemistry II** (CH 2415) | II.a. | CAAP test | To be determined by the college. |
| III.a – III.d | a. Semester exams, laboratory exam, laboratory reports,b. Design laboratory experimentsc. Presentation/Research Paperd. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered, with reporting every two years |

Division Chair Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Vice President of Instruction Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_