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

**Program Assessment Planning Document Semester & Academic year: Spring 2012**

**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** |
| 1. Life and Physical Science | 1. Creative and critical thinking |
| 1. Higher order thinking | 1. Ethics and social responsibility |
| 1. Valuing |  |
| 1. Managing information | 1. **Program objectives** (Unit specific) |

**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 |
| II. a  II. b | CAAP  ? | To be determined by the college.  To be determined by the college |
| III. a - III.e. | American Chemical Society(ACS)  Departmental Pre-test and post-test. | Periodically  Semester of course offering |
| **Intro to Forensic Chemistry**  (CH 1013) | I.a, I.b, & I.c | Semester exams , forensic case study | Semester of course offering |
| II. a  II. b | CAAP test  ? | To be determined by the college.  To be determined by the college |
| III.a, III.b,& III.c, III. d | departmental pre-test and post-test | Semester of course offering |
| **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. 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 |
| **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 Paper  c. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered |
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| **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 experiments  c. Presentation/Research Paper  d. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered |
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| **Organic Chemistry II** (CH 2415) | II.a.  III.a – III.d | CAAP test | To be determined by the college. |
| a. Semester exams, laboratory exam, laboratory reports,  b. Design laboratory experiments  c. Presentation/Research Paper  d. American chemical society (ACS) Pre-test and post-test | Every semester the course is offered. |
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