**ESSEX COUNTY COLLEGE**

**Course Outline**

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

**Course Prefix & Number**: MTH 121 **Course Title**: Calculus with Analytic Geometry I

**Credit Hours**: 4.0 **Contact Hours**: 4.0 **Name of Person Completing this Form**: Ron Bannon

**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

(Mathematics, Chemistry, CS & Engineering programs)

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 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** | Demonstrate knowledge of the fundamental concepts and theories from calculus. | WebAssign and hand-graded assessments | N/A |
| Utilize various problem-solving and critical-thinking techniques to set up and solve applied problems in engineering, sciences, business, and technology fields. | WebAssign and hand-graded assessments |
| Communicate accurate mathematical terminology and notation in written and/or oral form in order to explain strategies to solve problems as well as to interpret found solutions. | WebAssign and hand-graded assessments |
| Use appropriate technology, such as graphing calculators and computer software, effectively as a tool to solve such problems as those described above. | WebAssign and hand-graded assessments |
| **Program Goals\***  (if course is a major requirement) | Demonstrate knowledge of the fundamental concepts and theories from calculus, differential equations, linear algebra and discrete mathematics. (Mathematics) |  | M |
| Utilize various problem-solving and critical-thinking techniques to set up and solve applied problems in engineering, sciences, business and technology fields. (Mathematics) |  | M |
| Communicate accurate mathematical terminology and notation in written and/or oral form in order to explain strategies to solve problems as well as to interpret found solutions. (Mathematics) |  | I |
| Use appropriate technology, such as graphing calculators and computer software, effectively as a tool to solve such problems as those describe above. (Mathematics) |  | I |
| **Gen Ed Goals\***  (if course is a Gen Ed course) | **Quantitative Knowledge and Skills**: Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems. |  | M |

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