**Metropolitan Business Academy**

**Calculus**

**Teacher Contact Info:**

Teacher: Nick Sinatra

Email Address: NICHOLAS.SINATRA@new-haven.k12.ct.us

Phone # 475-220-7700

After School Hours: Thursdays 2:30-3:30

**Course Overview:**

Calculus is the study of how things change. It provides a framework for modeling systems in which there is change, and a way to deduce the predictions of such models. Our focus will be: Limits, Derivatives, and Integrals

**Course Standards:**

|  |  |
| --- | --- |
| **Mathematical Core Competencies:** | **21st Century Competencies:** |
| 1. Problem Solving and Critical Thinking in  Mathematics | 1. Problem Solving and Critical Thinking |
| 2. Clear and Effective Communication in  Mathematics | 2. Accessing and Analyzing Information |
| 3. Problem Solving and Critical Thinking in  Mathematics | 3. Communication and Collaboration |
| 4. Abstract and Quantitative Reasoning | 4. Creativity and Innovation |
| 5. Find the limit of a function if it exists | 5. Initiative, Self-Direction, and Accountability |
| 6. Find derivatives of polynomial, rational,  exponential, and logarithmic functions | 6. Citizenship and Accountability |
| 7. Find indefinite and definite integrals |  |

**Performance Task Chart:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of Performance Task** | **Description of Performance Task** | **Content Standards met by Performance Task**  **(numbers)** | **21st Century Competencies met by Performance Task**  **(numbers)** |
| Problem of the Month | Monthly Problem due by the end of each month | 1,2,3,4,7 | 1,2,3,5 |
| Unit Assessments | Exams or projects that assess knowledge at the end of each major topic | 3,5,6,7 | 1,4,5,6 |

**How you will be graded explanation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Mastery Language Abbreviations** | **Mastery Language** | **Progression to Meeting Standard** | **Standard Grading Equivalent** |
| XE | Exemplary | Exceeds Standard with Distinction | 100 |
| CO/XE | Competent/Exemplary | Exceeds Standard  (revise for exemplary) | 93 |
| CO | Competent | Meets Standard  (revise for exemplary) | 85 |
| EM | Emerging | Approaches Standard  (needs revision) | 70 |
| NY | Novice | Not Yet  (needs revision) | 60 |
| NE | No Evidence | No Evidence of Work Yet | 50 |