Course Syllabus

Department: Mathematics

Date: December 3, 2012

I. Course Prefix and Number: MAT 100

Course Name: Mathematics Seminar

Credit Hours and Contact Hours: 1 credit hour – 1 contact hour

Catalog Description including pre- and co-requisites:

This course exposes students to the wide variety of mathematics that exists beyond what is traditionally taught in mathematics classes. Specific topics discussed each semester will be based on interest and abilities of the students in the class and will vary each semester. This course is oriented towards students interested in studying mathematics, but the topics will be accessible for all students interested in learning more about mathematics. This class may be taken for credit more than once since the topics will change each semester.

Relationship to Academic Programs and Curriculum including SUNY Gen Ed designation if applicable:

Two semesters of this course are required for students seeking a degree in AS Mathematics.

II. Course Student Learning Outcomes:

Upon completion of the course the student will be able to:

a) Use the concept of proof to demonstrate mathematical certainty.
b) Name three mathematicians and the areas they were active in.
c) Give a presentation on a mathematical topic.
d) Use the process of abstraction to model real world problems.
e) Communicate mathematical knowledge and understanding.

College Learning Outcomes Addressed by the Course: (check each College Learning Outcome addressed by the Student Learning Outcomes)

☐ writing  ☐ computer literacy
☐ oral communications  ☐ ethics/values
☐ reading  ☐ citizenship
☒ mathematics  ☐ global concerns
☒ critical thinking  ☐ information resources

III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):

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<table>
<thead>
<tr>
<th>List identified College Learning Outcomes(s)</th>
<th>Specific assessment measure(s)</th>
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<tbody>
<tr>
<td>Mathematics</td>
<td>Written test, collected assignment or presentation.</td>
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<tr>
<td>Critical Thinking</td>
<td>Written test, collected assignment or group activities.</td>
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IV. Instructional Materials and Methods

**Types of Course Materials:**

Will vary with instructor.

**Methods of Instruction (e.g. Lecture, Lab, Seminar ...):**

- Lecture
- Discussions
- Presentations

V. General Outline of Topics Covered:

Topics will vary with the interests and abilities of the students.