1. Catalog Description of the Course. [Follow accepted catalog format.]

Prefix MATH  Course# 590  Title Graduate Topics in Mathematics  Units (3)
3 hours lecture per week
hours lecture per week
Prerequisites graduate standing/undergraduate seniors
Corequisites
Description New developments in mathematics. Repeatable by topic.
Graded
Gen Ed  CR/NC  Repeatable for up to 9 units
Categories
Lab Fee Required  A-F  Total Completions Allowed 3
Optional (Student’s choice)  Multiple Enrollment in same semester

2. Mode of Instruction.

<table>
<thead>
<tr>
<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
<th>Graded Component</th>
<th>CS #</th>
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</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>1</td>
<td>24</td>
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<tr>
<td>Seminar</td>
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<td>Laboratory</td>
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<tr>
<td>Activity</td>
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3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

The course is designed for graduate students as an elective.

Through this course, students will be able to

• Identify new important developments in mathematics.
• Reflect on issues in mathematical sciences
• Identify interdisciplinary areas involving mathematics
• Present current developments in mathematics in written and oral form

This course is not designed to satisfy the University Writing or Language requirements.

4. Is this a General Education Course  YES  NO
If Yes, indicate GE category and attach GE Criteria Form:

A (English Language, Communication, Critical Thinking)
A-1 Oral Communication
A-2 English Writing
A-3 Critical Thinking

B (Mathematics, Sciences & Technology)
B-1 Physical Sciences
B-2 Life Sciences – Biology
B-3 Mathematics – Mathematics and Applications
B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)
C-1 Art
C-2 Literature Courses
5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

New developments and current issues in mathematics and applications, such as Number Theory, Geometry, Analysis, Applied Mathematics, Philosophy, Bioinformatics, Computer Science. Student will research and analyze contemporary literature and related data. Research projects and writing assignments are included.

Does this course overlap a course offered in your academic program? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?

Does this course overlap a course offered in another academic area? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?
Signature of Academic Chair(s) of the other academic area(s) is required on the signature sheet below.

6. Cross-listed Courses (Please fill out separate form for each PREFIX)
List Cross-listed Courses

Signature of Academic Chair(s) of the other academic area(s) is required on the signature sheet below.

Department responsible for staffing: MATH

7. References. [Provide 3 - 5 references on which this course is based and/or support it.]

Depend on the topic of the course

8. List Faculty Qualified to Teach This Course.

Math faculty

a. Projected semesters to be offered: Fall ☐ Spring ☒ Summer ☐

10. New Resources Required. YES ☐ NO ☒
If YES, list the resources needed and obtain signatures from the appropriate programs/units on the sheet below.
a. Computer (data processing), audio visual, broadcasting needs, other equipment)
Existing labs

b. Library needs
Graduate texts.

c. Facility/space needs
classroom

11. Will this new course alter any degree, credential, certificate, or minor in your program? YES ☐ NO ☒
If, YES attach a program modification form for all programs affected.
Approval Sheet
Program/Course:

________________________________________________________
Program Chair(s)    Date

________________________________________________________
General Education Chair(s)    Date

________________________________________________________
Curriculum Committee Chair(s)    Date

________________________________________________________
Dean of Faculty    Date