Course Change Form

Date of Request: February 19, 2009
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Course Addition

1. Course Title: Number Theory
   Prefix & Num.: MATH 3900

2. Pre-requisite(s): MATH 2300
   Co-requisite(s): *LEC: 3.00 *LBC w/cr: 0.00 *LNC w/no cr: 0.00 Credits: 3.00
   Clinical: 0.00 Practicum: 0.00 Independent Study: 0.00
   Instructor permission required: No

3. Semester to be Implemented: Fall, 2009
   Day ☐ Extended Day ☒ Grade type Regular

4. Cost Code: NAT105 Lab Fee: 0 Additional Fees: $0.00 Potential WLF: 3.00 3.33

5. Is this course designed for a specific group? No Who?

6. Catalog Description: ☐ Now in Print, or ☒ Proposed Below:
   An overview of number theory and its applications, including the integers, factorizations, modular arithmetic, congruencies, Fermat's and Euler's Theorems, diophantine equations, cryptography, and RSA algorithm. Prerequisite: MATH 2300. 3 lecture hours per week.

7. Course justification (attach sheets if needed):
   This course can be used to fulfill Level 4 endorsement for Utah State math teachers. Also to be used in the new Math and Math Ed. degrees.

8. Are library resources adequate to support this change? Yes If not, how are those resources to be acquired?

9. Are technical and other resources available? Yes If not, how are those resources to be acquired?

10. Relationship to the curriculum: Would the course fill a G.E. requirement? No If yes, which G.E. area? If it does not fill a G.E. requirement, would the course offer elective credit? Yes

11. Transferability of the course: List comparable courses at other colleges and universities:

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<th>G.E.</th>
<th>Elective</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prefix &amp; Num.</th>
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<td>Introduction to Number Theory</td>
<td>3</td>
<td>MATH 4400</td>
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Approval Signatures:

Department Chair: Scott Mortensen Date: 2/19/09

Associate Dean/Dean: Victor Hasfurther Date: 2/19/09

Curriculum Chair: Date: 

Academic VP: Date: 