

# PROPOSAL TO CREATE, REVISE OR DELETE A COURSE

Department **Math**

(Proposed Course Number) **3343**

Proposed Course Title **Combinatorics I**

Nature of Proposed Change	
New Course	<input type="checkbox"/>
Revised Course	<input type="checkbox"/>
Deleted Course	<input type="checkbox"/>
Number Change	<input type="checkbox"/>
Adding Prerequisites	<input checked="" type="checkbox"/>
Description Change	<input checked="" type="checkbox"/>
Title Change	<input checked="" type="checkbox"/>
Editorial Change	<input type="checkbox"/>
(Old Number _____)	

Common Curriculum Status	
Presently in Common Curriculum	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Now Proposed for Common Curriculum	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If yes, which Understanding or Skill	_____
Estimated number of seats added or deleted from the Understanding	_____

Rationale (Explain why the change is being proposed, its relation, if any, to the major or minor program, and what curricular improvements will result.):

**The course description is antiquated and does not reflect the actual subjects being taught in this course. Moreover, the prerequisites do not accurately reflect the knowledge base necessary for success in this course. The title change reflects the addition of a second course in combinatorics, MATH 4344.**

Curricular Impact Statement (What curricular trade-offs will result if this course is approved?):

n/a

Teaching Resources (Explain any impact on personnel, faculty contact hours, Common Curriculum and other course offerings, and involvement in First Year Seminar.):

n/a

Proposed Bulletin Description:

**A study of the theory and problem solving techniques of algebraic and enumerative combinatorics. Topics include basic enumeration and the combinatorial proof, the binomial theorem, recurrence relations, generating functions, and inclusion-exclusion. Fall, alternate years.**

**Prerequisite: Math 2326 or consent of instructor.**

Present Bulletin Title and Description:

**A study of the theory and problem solving techniques of graph theory and enumeration. Topics include planar graphs, Eulerian and Hamiltonian circuits, graph coloring problems, spanning trees, trinomial coefficients, generating functions, recurrence relations, inclusion-exclusion, and Polya's enumeration formula. Fall, alternate years.**

**Prerequisite: Math 1311**

Instructor(s) <u>Brian K. Miceli</u>	IS THIS COURSE		
Semester course will first be offered <u>Fall 2008</u>	- cross-listed with another department? If so, which one? _____	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Effective date of change _____	- a prerequisite for another course? If so, which one(s)? <u>4344</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Frequency of offering <u>Fall, alternate years.</u>	- part of an interdisciplinary program? If so, which one(s)? _____	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is a similar course offered in another department? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	- a prerequisite or specific requirement for a major or minor in another department or program? If so, which one(s)? _____	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, attach explanation.	If any of the above responses is "Yes", have you contacted the appropriate department(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If this course will demand additional library resources, equipment, renovation and/or remodeling, computer facilities and time, or have a significant impact on workload or budget, have you arranged for these resources? Yes <input type="checkbox"/> No <input type="checkbox"/> None required <input checked="" type="checkbox"/>	Can a student enter this course with permission of the instructor without the prerequisite(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are there needs for technological resources not currently available on campus? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

## ROUTING

Please list the appropriate departments that have reviewed and endorsed this proposal: \_\_\_\_\_

Date: \_\_\_\_\_

AA (April 2003)