

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
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Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Gary Stoudt	Email Address gsstoudt@iup.edu
Proposing Department/Unit Mathematics	Phone 7-2608

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply)

New Course Course Prefix Change Course Deletion
 Course Revision Course Number and/or Title Change Catalog Description Change

<i>Current Course prefix, number and full title</i>	<i>Proposed course prefix, number and full title, if changing</i>
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2. Additional Course Designations: check if appropriate

This course is also proposed as a Liberal Studies Course. Other: (e.g., Women's Studies, Pan-African)
 This course is also proposed as an Honors College Course.

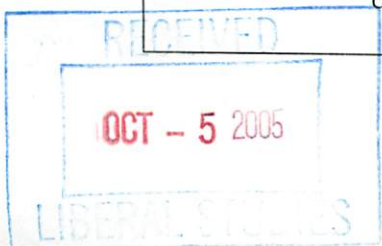
3. Program Proposals

New Degree Program Catalog Description Change Program Revision
 New Minor Program Program Title Change Other
 New Track New Track

<i>Current program name</i>	Mathematics Honors Track	<i>Proposed program name, if changing</i>
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4. Approvals		Date
Department Curriculum Committee Chair(s)	<i>[Signature]</i>	9-29-05
Department Chair(s)	<i>[Signature]</i>	9-30-05
College Curriculum Committee Chair	<i>[Signature]</i>	10-03-05
College Dean	<i>[Signature]</i>	9-30-05
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs		

* where applicable



II. Description of Curriculum Change

1. Revised Catalog Description

The Mathematics Honors Track is open by department permission to Applied Mathematics and Mathematics majors with at least a 3.25 GPA in total university coursework. Students complete a two-course sequence (either MATH 421-422 or MATH 476-477, which counts towards the major) and two semesters on honors thesis research and writing. Honors theses are completed individually under the direction of a department professor who specializes in the student's area of interest and are approved by a thesis committee comprising the thesis director and two other faculty members, one of whom may come from outside the Mathematics Department.

Students interested in the Mathematics Honors program should discuss this opportunity as early as possible with their advisors. Students file an application with the department chairperson any time after completing MATH 272, normally early in the junior year. The program has been designed to enrich the undergraduate education of qualified majors. The program should be particularly attractive to students seeking admission to graduate school. Honors coursework is designated on university transcripts; students completing the departmental honors program are recognized at departmental commencement ceremonies.

Mathematics Honors Track

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MATH 421-422 Advanced Calculus I and II

or

MATH 476-477 Abstract Algebra I and II

6cr (1)

MATH 483 Honors Thesis/Independent Study

6cr (2)

(1) MATH 421-422 and 476-477 also count towards controlled mathematics electives.

(2) Two semesters, 3cr each.

2. Rationale for Change

Participating in an honors program enables our best students to have a rewarding experience that will develop their research and communication abilities and build self-confidence. The additional academic experience better prepares the student for graduate studies. Writing a thesis gives the student an opportunity to explore a mathematics topic in depth and get a hint of the life of a working mathematician.

An honors program will also contribute to the academic climate of the Department among students and faculty. It can help with recruitment.

III. Implementation

1. How will the proposed revision affect students already in the existing program?

Current juniors and seniors are unlikely to be able to participate in this program simply due to time constraints. However, once the program is approved, any student who meets the program requirements and can schedule the appropriate courses will be considered. This proposal does not make any changes in our course rotation or course offerings that would affect our current students.

2. Are faculty resources adequate?

Faculty resources are adequate. We are a large department and faculty have varied interests.

3. Are other resources adequate?

The College has included additional credits for support of twelve Honors Independent Study projects/theses per year for Mathematics in its budget request. The College will provide resources to cover faculty pay for Independent Study honors projects.

4. Do you expect an increase or decrease in the number of students as a result of these revisions? If so, how will the department adjust?

Having an honors program has the potential to attract more mathematics majors into our programs, including students in the Robert E. Cook Honors College.

5. Intended Implementation date

We hope to begin accepting students into the program during 200640, so that they can take MATH 483 during 200640 and 200650.

IV. Periodic Assessment

1. The Mathematics Department will evaluate the honors track through thesis committees, the Mathematics/Applied Mathematics Curriculum Committee, and as part of the course MATH 480 Senior Seminar, whose course description reads (in part) "To assess the effectiveness of the mathematics curriculum...." The quality of theses will be continually evaluated by faculty. We will keep track of honors candidates and survey students concerning the Honors Track.

2. MATH 480 is offered every spring semester, and we will survey to students at that time.

3. The Mathematics Department is its own evaluating entity for this track. There is no accrediting body for mathematics programs, let alone honors programs.

V. Course Proposals

We want to activate MATH 483 Honors Thesis/Independent Study for our department. The Catalog Description would read as follows.

MATH 483 Honors Thesis/Independent Study**var-3-6cr**

Prerequisites: Admission to the Mathematics Honors Program.

Two-semester sequence of research and writing, culminating in an honors thesis. Honors theses are completed individually under the direction of a department professor and are approved by a thesis committee consisting of the thesis director and two other faculty members, one of whom may come from outside the Mathematics Department. Must be taken twice for a total of 6cr.

VI. Letters of Support or Acknowledgement

We modified the QPA policy, but we did not act on the other comments.

From: Gary Stoudt [Gary.Stoudt@iup.edu]
Sent: Monday, March 28, 2005 3:20 PM
To: 'Janet Goebel'
Subject: Letter of Support Math Honors

Hi Janet.

Attached is a proposal for a Math Honors track. It would probably be good if we got a letter of support from you for the program. The program requires no new resources from you (our Dean has promised resources). The program does not include any new courses for HC students due to the fact that we do not have the enrollments.

Gary

Gary Stoudt
Mathematics Department

From: Janet Goebel [jgoebel@iup.edu]
Sent: Monday, March 28, 2005 4:09 PM
To: Gary Stoudt
Subject: Fw: Letter of Support Math Honors

These were some of Rick's initial reactions. Would you like to talk with us sometime soon?

----- Original Message -----

From: "Rick Kutz" <RDKUTZ@iup.edu>
To: "Janet Goebel" <jgoebel@iup.edu>
Sent: Monday, March 28, 2005 3:54 PM
Subject: Re: Letter of Support Math Honors

> The 3.0 IUP qpa is inconsistent w. our policty of 3.25 overall. I wonder
> if
> that will make that big a difference for him? (I don't know the math
> population very well.) Same idea we had w. Geoscience: why not add HNRC
> 499? The 2 semesters of thesis would be 6 /H/ credits. HNRC 499 would
> toal
> 9 & that's much closer to the nat. average. It wouldn't negatively affect
> the student. One other advantage from the university's perspective would
> be
> the effect of an honors population from different majors / departments /
> colleges taking synthesis togehter & having that common experience.
> Also, what would be wrong w. designating those math courses as /H/
> courses?
> They probably never run over 20 anyway. The result to this would simply
> be
> every student in the dept who takes that course--whether they are in the

- > program or not--has an /H/ on their transcript. It seems it will be the
- > same course anyway.

We modified the QPA policy, but we did not act on the other comments. We did not consider the /H designation appropriate.