

Proposal Title: Linear Algebra

Sponsor(s): Gary Itzkowitz Dept.: Math/Computer Science

Check one: Course Specialization Concentration Achievement Certificate
 Prerequisite Minor Change Major Program
(please name: deletion or credit/title/catalog change)

Certification Program Undergraduate Graduate 3 Credit Hours

Step 1 (Department)	Step 2 (Receipt)	Step 3 (Division CC)
<input checked="" type="checkbox"/> Approved <u>12/16/83</u> date <input type="checkbox"/> Not Approved <u>David L. Travis</u> Dept. CC Chairperson <input checked="" type="checkbox"/> Reviewed <u>12/20/83</u> date <u>D. Frost</u> Chairperson, Dept.	SCC# <u>83-84-39</u> Proposal Received <u>1/4/84</u> date <u>Shirley A. O'Day</u> Chairperson, SCC	Reviewed <u>Jan 26 84</u> date <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved Comments: <u>Jim O'Keefe</u> Chairperson, Div. Curr. Comm.

Step 4 (Academic Dean) Comments:

Reviewed 1/27/84
date

Ken Pearson
Signature, Dean of Division

Step 5 (SCC)

Open Hearing Date: 2/29/84 Approved by Senate Curriculum Committee 4/6/84 (date)

Returned to sponsor(s) for the following reasons:
Hold until 3/13 - Approval of Cur. Sec. Major changes needed first
Done 4/6/84

Step 6 (Faculty Senate)

Presented to Faculty Senate (date): 4/13/84 Approved Not Approved

Notification to Vice-President Academic Affairs (date): 4/6/84

Shirley A. O'Day
Signature: SCC Chairperson

Step 7 (Vice-President for Academic Affairs)

~~CHANGED~~ ^{PRE-REQUISITE} Course received 4/25/04 (date)

^{PRE-REQUISITE} Course approved Yes No

If no, reasons are as follows:

Student credit hours NA

Faculty load hours NA

Equalized credit hours NA

Official copy and approval sheet filed 1/1/04 (date)

Signature [Signature]
(Vice-President for Academic Affairs)

Registrar

Approved course description received _____ (date)

Hegis Taxonomy and Course Number assigned _____

Signature _____
(Registrar) (Date)

Notification forwarded: Senate Curriculum Committee Chairperson, Department Chairperson(s),
Academic Dean(s), Registrar, Sponsor(s)

CHANGE IN PRE-REQUISITE FOR LINEAR ALGEBRA (1701.210)
Sponsored by Gary S. Itzkowitz, Ph.D.

1. Existing Title and Pre-requisite
1701.210 - Linear Algebra
(Pre-requisite: 1701.130, Calculus I)

2. Proposed Pre-requisite
1701.131 - Calculus II

3. Rationale

a) When only Mathematics majors took Linear Algebra, there was never a problem with the pre-requisite since they had to take three semesters of Calculus, and, therefore, never tried to take Linear Algebra in their freshman year after Calculus I.

b) As of September 1982, Linear Algebra became a requirement for Computer Science majors who also only had Calculus I as a pre-requisite and requirement (Calculus II and III are not required for Computer Science majors). Hence, at registration time, they were signing up for Linear Algebra in the Spring semester of their freshman year. Considering that Linear Algebra is a sophomore level course, we feel this is too early for them.

c) The course content is too sophisticated for someone with only a Calculus I background. The student with only Calculus I does not have the mathematical maturity to handle Linear Algebra. Last year, our Computer Science majors had a disaster in Linear Algebra when forced to compete with our more "mature" Mathematics majors.

d) It is our expectation that with this new pre-requisite our Computer Science majors will be more closely matched with our Mathematics majors when taking Linear Algebra.

4. Curricular Impact

The major impact of this change will be to bring up the mathematical maturity level of our Computer Science majors to a point where they will be properly prepared for Linear Algebra; a result that is highly desirable both for teachers and students.

5. Consultations

- a) From Computer Science
 - i) Prof. Jack Cimprich
 - ii) Prof. Seth Bergman
- b) From Mathematics
 - i) Prof. Joanne Trimble
 - ii) Prof. Robert Mitchell