# HONORS SUPPLEMENTAL SYLLABUS**

**COURSE/TITLE/UNITS:**     MATH 230
**Introduction to Linear Algebra, with Applications**             **3.0 UNITS**
**INSTRUCTOR:**         Jill Nelipovich

**In addition to the regularly assigned coursework on the syllabus, the student will complete the following:**

**DESCRIPTION OF HONORS REQUIREMENTS**

1. **Reading & Research Requirement:** Student will choose a topic within the realm of Linear Algebra. Topics may include: the Geometry of Vector Spaces, Linear Programming, Duality, Markov Chains, Steady State Vector and Google's PageRank Algorithm, Markov Chains and Baseball Statistics.

2. **Writing Requirement – Topic of Interest*:** Student will complete a **5-page, single spaced in-depth research paper** on the mathematical research topic chosen, reached in consultation with the instructor. A bibliography will be expected.

3. **Presentation to Class:** A presentation to the class on the mathematical topic chosen. Needs to include more than a verbal explanation, such as power point or board work (Minimum of 15 minutes).

4. **Presentation at College Hour:** Student is expected to present his/her mathematical topic at college hour.

5. **Class Participation and Leadership:** Student must participate in class discussions by being prepared for the topic(s) of the day and provide group leadership as necessary.

6. **Office Hour Contacts**: Make and keep a minimum of 4 appointments with your instructor. This will give you an opportunity to discuss your progress on your individual projects. Please set these appointments during the first 3 weeks of the semester.

**OBJECTIVES:** *Upon successful completion of the course the student will be able to accomplish the learning objectives stated in the regular syllabus and the objectives listed below for the Honors contract:*
1. Demonstrate critical thinking skills in their written report and oral presentation. (ILO1/ILO2,ILO3)
2. Access and interpret mathematical texts. (IL01, IL02, ILO3,ILO4)
3. Analyze various difficult problems as they relate to the mathematical topic. (ILO2)

**REGULAR COURSE REQUIREMENTS**

| | | |
|---|---|---|
| Examinations (3) | 450 | points |
| Homework (Assigned per chapter) | 100 | points |
| Projects | 100 | points |
| Class Participation & Boardwork | 50 | points |
| Final Exam | 300 | points |
| **Total Regular Points:** | **1000** | **points** |

**HONORS SUPPLEMENTAL COURSE REQUIREMENTS**

| | | | | |
|---|---|---|---|---|
| 1 | Writing Requirement | 150 | points | HONORS |
| 1 | Presentation to Class | 100 | points | HONORS |
| | Class Participation and Leadership | 50 | points | HONORS |
| | Office Hour Contacts | 50 | points | HONORS |
| | **Total Honors Points:** | **350** | **points** | |
| | **Maximum points achievable:** | **1350** | **points** | |

**Honors Syllabus: 35% extra course work**

** NOTE: Please assess your class schedule, workload, and non-school related responsibilities prior to signing the Honors contract. Once you sign the Honors Contract you must complete the semester as an Honors Student. You cannot switch back to the Non-Honors course.