**Math 120C Suggested Syllabus**

(Based on 29 lectures)

**Text:** *A first course in abstract algebra*, John Fraleigh, 7th Edition.

For optional topics of this course contact Dr. Pantano

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| **Lecture** | **Section** | **Topic** |
| 1 | --- | Review of Group Theory |
| 2 | --- | Continued |
| 3 | --- | Review of Polynomials and Field Theory |
| 4 | --- | Continued |
| 5 | 33 | Finite Fields |
| 6 | 33 | Continued |
| 7 | 33 | Continued |
| 8 | 48 | Field Automorphisms |
| 9 | 48 | Continued |
| 10 | 48 | Continued |
| 11 | 48 | Continued |
| 12 | 49 | Isomorphism Extension Theorem |
| 13 | 49 | Continued |
| 14 |  | Review |
| 15 |  | **Midterm** |
| 16 | 50 | Splitting Fields |
| 17 | 50 | Continued |
| 18 | 50 | Continued |
| 19 | 51 | Separability |
| 20 | 53 | Galois Theory |
| 21 | 53 | Continued |
| 22 | 53 | Continued |
| 23 | 54 | Illustrations of Galois Theory |
| 24 | 54 | Continued |
| 25 | 54 | Continued |
| 26 | 55 | Cyclotomic Extensions |
| 27 | 55 | Continued |
| 28 | 56 | Insolvability of the Quintic |
| 29 |  | Review |