**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  |