## MATH 5402: Abstract Algebra II Spring 2020

Instructor: Tony Shaheen E-mail: <u>ashahee@calstatela.edu</u> Office: Simpson Tower 317 Phone: (323) 343-2159 (It's much better to email me. I won't get any message you leave on my phone.)

Office Hours: to be announced in class.

Course Website: Follow the link from http://www.calstatela.edu/research/ashahee/

Lectures: Monday and Wednesday, 4:30pm—5:45pm, in FA 308.

**Textbook:** Abstract Algebra, by David Dummit and Richard Foote, 3<sup>rd</sup> edition.

Prerequisite: Math 5401.

**Description:** Rings, ideals, prime and maximal ideals, Euclidean domains, principal ideal domains, unique factorization domains, polynomial rings, irreducibility criteria for polynomials, field extensions, splitting fields, separable extensions, cyclotomic extensions, cyclotomic polynomials, finite fields, Galois theory.

**Student learning outcomes:** By the end of the course you should understand the definitions of the objects introduced in class. You should understand the theorems presented in class. You should be able to prove theorems about and do computations with the objects that we introduce in class.

**Grading:** Your grade will be based on two tests and a cumulative final. Each exam is worth 1/3 of your grade.

**Homework:** Homework will be assigned, but not collected. The homework problems and solutions are on the course website.

**Exams:** There are two tests and a final. All tests are in the regular classroom. The dates and times of the exams are as follows. The below dates are tentative. The final time/day is scheduled by the school and it may change.

<u>Test 1</u>: Wednesday, March 11. <u>Test 2</u>: Wednesday, April 15. <u>Tentative Final Date</u>: Wednesday, May 13, 2:30—4:30.

**ADA statement:** Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. Please let me know in the first week of class if you will be taking tests at the OSD office.

**Academic honesty statement:** Students are expected to do their own work. Copying the work of others, cheating on exams, and similar violations will be reported to the University Discipline Officer,

who has the authority to take disciplinary actions against students who violate the standards of academic honesty.

**Student responsibilities:** Students are responsible for being aware of all announcements that are made in class, such as changes in exam dates, due dates of homework and papers, and cancellation of class due to instructor's absence. Students are responsible for announcements made on days that they are absent.

Students must check their CSULA email account regularly for information from the instructor and the Department. Failure to do so may result in missed deadlines or other consequences that might adversely affect students. Note that you can forward this email account to any other account of your choosing.