

INDIANA STATE UNIVERSITY  
Number Theory

Math 411/511

Spring 2018

Instructor: Dr. Jodi Frost  
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Office Hours: 2:00 - 2:50pm MW; 10:00am - 10:50am F and by appointment -- email me to set one up!

Course Description and Goals:

An introductory course in number theory. Topics include properties of the integers, number theoretic functions, congruences, and applications.

Required for Class:

- Elementary Number Theory by Underwood Dudley — any edition is acceptable.
- A willingness to learn, discuss, explain and experience mathematics in (possibly) a new and deeper way.
- Make sense of problems and persevere in solving them.

Grading:	% of Total Grade
Homework/activities	30%
Tests	45%
Final Exam	25%

\*\*\*For Math 511 students, there will be an additional research/homework assignment(s) that will be discussed on an individual basis and will account for 10% of your grade, other weights will be reduced accordingly.

Changes to the grading policy are at my discretion and will be announced in class.

Grading Scale:

The following is an approximate grading scale used for final course grades.

A	93 - 100%	C+	77 - 79%	D-	60 - 62%
A-	90 - 92%	C	73 - 76%	F	Below 60%
B+	87 - 89%	C-	70 - 72%		
B	83 - 86%	D+	67 - 69 %		
B-	80 - 82%	D	63 - 66%		

The Instructor reserves the right to exercise professional judgment in determining final grades.

Professional Responsibility and Development: Participation in the class is important for your learning and that of your classmates. Participating in discussions, activities, and in asking questions (very important!) all help to promote your learning. It is very important that you show respect for your classmates by not talking when one of them or I am talking. What is important in this class is that you learn to explain why and not just how, and learn to approach mathematical concepts in different ways. There should be no text messaging or using laptops to look at email etc. during class.

Please be sure to turn off cell phones and put them away prior to class starting. If I observe you using a cell phone for any reason during class time you will have points deducted from this score. This class will be a combination of lectures, discussions and activities, so attending class is important. You should arrive on time and stay for the whole

period. Excessive absences will affect your grade.

#### Textbook:

The textbook will be a valuable resource for you outside of the classroom. It is designed to supplement the lectures and activities done in the classroom. Readings, homework, and supplemental questions may be assigned out of the textbook.

#### Homework:

Homework will be given out periodically and you must turn it in for a grade. Work should be neat, complete and well organized. Please put your name on the top of each paper handed in. If necessary, please be sure to staple your assignment before submitting it to me. I may also provide supplemental problems to work on, that are not required to be handed in, but may help you better master the material.

Late Work: I will assign a due date, and will give a one class grace period for homework to be handed in. After that point late work will not be excepted. An exception to this may be made due to extraordinary circumstances, but it is at my discretion and you must make the arrangements with me as soon as possible. \*\*\*This policy is for homework assignments only\*\*\*

#### Exams:

Exams may be in-class or take home exams. You are not allowed to collaborate with other students or use outside resources on take home exams. There will be three exams, in addition to the final exam. Dates will be announced during the semester. Except for emergencies, you must contact me by the day of the test if you are not able to take the test. In general, make-ups need to be taken within one week of the in-class test. Exceptions to this can be made in extraordinary cases, but it is your responsibility to contact me about this in a timely manner.

#### Final Exam:

The final exam for this course will be comprehensive and will follow the final exam schedule as provided by the registrar. This semester, the final exam is scheduled for Wednesday, May 9 at 3pm. By registering for this course, you are committing to taking the final as scheduled.

#### Americans with Disabilities Act Statement:

Indiana State University recognizes that students with disabilities may have special needs that must be met to give them equal access to college programs and facilities. If you need course adaptations or accommodations because of a disability, please contact us as soon as possible in a confidential setting either after class or in my office. All conversations regarding your disability will be kept in strict confidence. Indiana State University's Student Support Services (SSS) office coordinates services for students with disabilities: documentation of a disability needs to be on file in that office before any accommodations can be provided. Student Support Services is located on the lower level of Normal Hall in the Center for Student Success and can be contacted at 812-237-2700, or you can visit the ISU website under A-Z, Disability Student Services and submit a Contact Form. Appointments to discuss accommodations with SSS staff members are encouraged.

Once a faculty member is notified by Student Support Services that a student is qualified to receive academic accommodations, a faculty member is obligated to provide or allow a reasonable classroom accommodation under ADA. Faculty should contact Rita Worrall at 237-2301 or Debbie Huckabee at 237-7920 for questions about or assistance with accommodations for students with disabilities.

#### Academic Honesty:

It is imperative that you adhere to standard practices of academic honesty and integrity in this course. While you are encouraged to work with other class members on activities, it is extremely important that you turn in your own

work, in your own words. NEVER just copy the work of another person. I encourage you to review the University's Academic Dishonesty Policy found in the Student Code of Conduct (<http://www.indstate.edu/sjp/docs/code.pdf>).

Academic Freedom: "Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter which has no relation to their subject." The preceding comes from the American Association of University Professors statement on academic freedom. Though the entire statement speaks to many issues, it is this portion on conduct of the course that is most relevant. For the purpose of Foundational Studies courses this means that faculty have the right to conduct their class in a fashion they deem appropriate as long as the material presented meets the learning objectives laid out by the entire faculty. <http://www.aaup.org/AAUP/pubsres/policydocs/contents/1940statement.htm>

Student Disclosures of Sexual Misconduct:

Indiana State University fosters a campus free of sexual misconduct including sexual harassment, sexual violence, intimate partner violence, and stalking and/or any form of sex or gender discrimination. If you disclose a potential violation of the sexual misconduct policy I will need to notify the Title IX Coordinator. Students who have experienced sexual misconduct are encouraged to contact confidential resources listed below. To make a report to the Title IX Coordinator, visit the Equal Opportunity and Title IX website: <http://www.indstate.edu/equalopportunity-titleix/titleix>.

Confidential Resources:

The ISU Student Counseling Center – HMSU 7<sup>th</sup> Floor; 812-237-3939;

[www.indstate.edu/cns](http://www.indstate.edu/cns)

The ISU Victim Advocate – Leah Reynolds; HMSU Room 813; 812-237-3829(office); 812-243-7272;

[leah.reynolds@indstate.edu](mailto:leah.reynolds@indstate.edu)

Campus Ministries - <http://www2.indstate.edu/sao/campusministries.htm>;

For more information on your rights and available resources:

<http://www.indstate.edu/equalopportunity-titleix/titleix>