

Professor: Dr. Chris Black  
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Text: None required. Notes will be provided through Canvas, although you may need to consult one or more external textbooks.

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#### GOALS FOR COURSE:

The goal for this course is to provide students with the opportunity to review mathematical content topics to prepare to take and pass the Washington Educator Skills Test - Endorsement (WEST-E) in Secondary Mathematics. As of 9/2014, the WEST-E requirement is met by passing the NES in mathematics, administered by Pearson.

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#### GRADING:

As the purpose of this course is improvement, all students will enroll using the Credit/No Credit grade option. A grade of 'Satisfactory' will be assigned if all exercise sets and exams are completed according to the Course Schedule. The exercises must be completed with a score of 75% or better before proceeding in the course.

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#### EXAMS:

Exams in this course are sample WEST-E exams, and other multiple choice exams of a similar format. There will be one such practice test for each unit along with a pre-test and post-test. You are on your honor to simulate test-taking conditions for these practice exams. If a score of 75% is not achieved on a practice test on the first try, it becomes a homework assignment to be completed with 80% correctness. **All exams must be completed according to the Course Schedule for a 'Satisfactory' grade in the course.**

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#### STRUCTURE OF THE COURSE:

In each unit, you will be able to download a review packet of notes on the topic of that unit. Then you will be assigned a set of 15-30 exercises. Work through the exercises, entering your answers into Canvas for assessment. As the passing score for the NES is 220 out of 300 points, roughly 73%, **the exercises are not complete until you have earned 75% or higher.** Then you will take a practice exam. During these exams, do your best to simulate test-taking conditions – choose a time and place where you can expect to be uninterrupted for the duration of the testing period; use nothing but a calculator, pencil and paper. After the exam, go back and review the problems that you missed – this is when the improvement will occur.

If you did not earn a score of at least 75% on a practice test, you will be required to work through the problems as additional homework until at least 80% of them are correct. If you did earn at least 75% on the practice test the first time through, then the unit is complete and you may proceed.

As you complete one unit the next will become available, allowing you to proceed at your own pace, with the constraint that **each unit must be completed by its closing date.**

#### COURSE PHILOSOPHY:

The purpose of the course is to prepare you to independently pass the state-required NES exam that will allow you to achieve certification to teach secondary mathematics in Washington State. Each student in this course has different content areas of strength and content areas that need improvement. The pre-test will help to diagnose the areas of strength and areas that need improvement. Take the results from that test into account while you proceed through the course.

You cannot proceed in this course without achieving 75% (or 80%) mastery of the exercise sets and practice exams. Remember that this course is preparing you to take an individual competency exam – you should give each test question and unit exercise your best effort. The 75% threshold is a *bare minimum*, and you should strive for better. This course will not be effective at preparing you to smash that NES exam if you just settle for the bare minimum amount of effort.

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#### COURSE SCHEDULE:

It is recommended that you progress through the course at the rate of one unit a week. Be aware that **each unit will be closed one week after the due date**. If you do not complete a unit before the closing date, then **materials cease to be accessible and the course will not be successfully completed**. The course schedule indicates the “Unit Closes” dates by which the units **must** be completed. This is a firm schedule, and no exceptions will be made. In summary: You may work ahead in this course, but you cannot lag significantly behind.

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#### COURSE TOPICS:

The topics for the course are taken directly from the five content domains listed in the conceptual framework for the NES in mathematics. Each content domain is broken into two units for the course. These are broadly stated as:

- ▷ UNITS 1 & 2: Mathematical Processes and Number Sense
- ▷ UNITS 3 & 4: Patterns, Algebra and Functions
- ▷ UNITS 5 & 6: Measurement and Geometry
- ▷ UNITS 7 & 8: Trigonometry and Calculus
- ▷ UNITS 9 & 10: Statistics, Probability and Discrete Mathematics

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#### EXERCISE SETS:

There are two exercise sets for each of the above-mentioned content domains:

- UNIT 1: Mathematical Processes
- UNIT 2: Number Sense
- UNIT 3: Measurement and Coordinate & Transformational Geometry
- UNIT 4: Euclidean and non-Euclidean Geometry
- UNIT 5: Relations, Functions and Polynomials
- UNIT 6: Log/Exponential, Radical, Rational, Absolute Value and Piecewise Functions
- UNIT 7: Trigonometry
- UNIT 8: Differential and Integral Calculus
- UNIT 9: Probability and Statistics
- UNIT 10: Discrete Mathematics

For most topics, you will have access to a packet of review notes. Read through the review packet and then begin the exercises for that topic. You may need to consult outside references. Exercise sets will vary from 15 - 30 problems in length. Work the problems out on paper, then enter your answers carefully into Canvas to be assessed. You will receive instant feedback on each assignment.

**Students must receive a score of 75% or better to successfully complete an exercise set.** You will not be allowed to proceed to the next unit until this score is attained. If you are having problems with an exercise set, consult the note packet available through Canvas, a textbook, or the professor. Full solutions to each exercise set will become available once the exercises have been completed.

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HONOR AND RESPECT:

Each of us should consider our placement at this institution to be a privilege. We need to have respect for one another and for ourselves. In light of these facts, cheating in any form will not be tolerated. You are encouraged to work together on the exercise sets, however be sure that you can arrive at the answer independently. Remember that the purpose of the course is to prepare you to take an independent exam. The word “plagiarize” is defined by Merriam-Webster as “to steal and pass off (the ideas or words of another) as one’s own: use (another’s production) without crediting the source.” This is a very serious offense.

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DISABILITY SERVICES:

Students with disabilities wishing to use academic adjustments in their CWU classes must be registered with Disability Services (DS). Information about the DS intake process may be obtained by emailing [cds@cwu.edu](mailto:cds@cwu.edu) or calling (509) 963-2171. Qualified students with disabilities may establish academic adjustments in this class by either sending me their official on-line accommodation request or speaking with me to establish the manner in which requested adjustments will be delivered.