

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 Middle Level Mathematics. As of 9/2014, the WEST-E is now the NES in mathematics, administered by Pearson.

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#### GRADING:

As the purpose of this course is improvement, the course is essentially PASS/FAIL. A grade of 'A' will be assigned if all exercise sets and exams are completed according to the Course Schedule, and a grade of 'F' will be assigned if the course requirements are not met. Each set of 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 'A' grade in the course.**

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#### STRUCTURE OF THE COURSE:

You will be able to download a review packet of notes on the topic of each content domain (which will cover 1, 2 or 3 units of the course). For each unit, you will be assigned a set of 15-30 exercises that come from the topics in the review packet. 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.

As you complete one unit, then 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 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 recommended completion date**. That is, the unit closes one week after the date shown on the Canvas calendar. 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 exceptions will be made in rare case only. In summary: You may work ahead in this course, but you cannot lag significantly behind.

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## 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 middle-level 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% mastery of the exercise sets and 75% mastery of the problems on the 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 the NES exam if you just settle for the bare minimum amount of effort.

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## COURSE TOPICS:

The topics for the course are taken directly from the four content domains listed in the conceptual framework for the NES in mathematics. Many content domains are broken into two or three units for the course. These are broadly stated as:

- ▷ UNIT 1: Number Sense and Operations
  - ▷ UNITS 2, 3 & 4: Algebra and Functions
  - ▷ UNITS 5, 6 & 7: Measurement and Geometry
  - ▷ UNITS 8 & 9: Statistics, Probability and Discrete Mathematics
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## EXERCISE SETS:

There is one exercise set for each of the above-mentioned units:

- UNIT 1: Number and Operation
- UNIT 2: Patterns, Relations and Functions
- UNIT 3: Algebraic Techniques and Linear Relations
- UNIT 4: Nonlinear Relations and Concepts of Calculus
- UNIT 5: Measurement
- UNIT 6: Euclidean Geometry
- UNIT 7: Coordinate and Transformational Geometry
- UNIT 8: Discrete Mathematics
- UNIT 9: Probability and Statistics

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, search a textbook, or ask the professor. Full solutions to each exercise set will become available once the exercises have been completed. You are encouraged to go back and learn how to do the problems you didn't get correct.

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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.