

# Course Syllabus

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## MATH 321 | Mathematics BA Capstone

### General Information

**Class Time:** None Required (Course is Asynchronous)

**Location:** Canvas

**Instructor:** Dr. Emilie Hancock (Please refer to me as Emilie or Dr. Hancock)

**Office:** Samuelson 218C | **Email:** emilie.hancock@cwu.edu | **Phone:** 509.963.2402

**Office Hours:** Tu 10am - 12pm, W 9am - 11am (no appointment necessary)

Contact me to schedule an in-person or virtual appointment at an alternate time.

Refer to the [course calendar](#) for any planned changes to office hours

### Required Materials

- **Textbook:** None.
- **Materials from Math BA content courses:** Precalculus (MATH 153/4), MATH 172, MATH 173, MATH 260, MATH 265, MATH 314, MATH 332, MATH 355, MATH 360, MATH 430
  - You may need to contact past instructors to access old Canvas course materials.
  - While not required for the Math BA, content from MATH 164 and MATH 226 is relevant to the NES exam. You may want a copy of *Mathematics for Elementary Teachers and Activities* by Sybilla Beckmann (any edition). I have at least one copy in my office.
- **Canvas Access:** I will update the course site on Canvas with announcements, assignments, handouts, and due dates. Check Canvas often.

### Disability Support Services

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. [Disability Services \(https://www.cwu.edu/disability-services/\)](https://www.cwu.edu/disability-services/) serves students with permanent and temporary disabilities attending Central on the Ellensburg campus, online or at any of our eight University Centers. Their mission is to make university life accessible to students with disabilities. They work individually with students identifying barriers, and providing accommodations to ensure equal access. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations: Hogue Hall 126, 509.963.2214, [DS@cwu.edu \(mailto:DS@cwu.edu\)](mailto:DS@cwu.edu).

### Course Overview and Outcomes

Mathematics BA graduates must know a broad range of mathematical concepts and be fluent with numerous skills. This course will require teacher candidates to demonstrate conceptual knowledge and procedural proficiency using a variety of methods. This course will help you review the broad range of concepts and skills important to secondary mathematics teachers which will enable you to pass the [National Evaluation Series \(NES\) mathematics test \(http://www.west.nesinc.com/TestView.aspx?f=HTML\\_FRAG/NT304\\_TestPage.html\)](http://www.west.nesinc.com/TestView.aspx?f=HTML_FRAG/NT304_TestPage.html). This is the official test to fulfill the content knowledge requirement for candidates seeking a mathematics endorsement (grades 5-12) and a Washington teaching certificate.

Major content topics of the course include:

- Content Domain 1: Mathematical Processes and Number Sense
- Content Domain 2: Patterns, Algebra, and Functions
- Content Domain 3: Measurement and Geometry
- Content Domain 4: Trigonometry and Calculus
- Content Domain 5: Statistics, Probability, and Discrete Mathematics

Upon successful completion of this course, you will be able to:

- Demonstrate proficiency in applying problem-solving skills to various mathematical domains.
- Reflect on understanding of the central concepts, tools of inquiry, and structures of the discipline.
- Integrate and apply knowledge of disciplinary content and pedagogical practice to create a plan for self-directed professional development.
- Showcase a creative synthesis of program work.

## Grading Scale and Method of Evaluation

Final letter grades will be determined based on your weighted percent grade, rounded to the nearest whole percent.

Letter Grade	F	D	D+	C-	C	C+	B-	B	B+	A-	A
Percent	0-59	60-66	67-69	70-72	73-76	77-79	80-82	83-86	87-89	90-92	93-100

Overall grades will be determined as a weighted average:

- 35% Competency Checkpoints
- 20% NES Study Record
- 35% Pass NES Practice Exam
- 10% Reflection on the Major

### Competency Checkpoints

There are 16 competencies tested by the NES Mathematics exam and reviewed in this course. For each competency you will complete a checkpoint quiz. You have 10 minutes to answer the five questions, which is the pace required to finish the NES exam. If you score at least 4 out of 5 on the quiz, you pass that competency and may progress onto the next competency. You only get one attempt at the quiz, but you can review the quiz and your responses as many times as you want.

If you do not score at least 4 out of 5, you will need to first review a knowledge and skills page and then pass a review quiz.

### NES Study Record

The most important step you must consistently do during this review course is record the questions you answer incorrectly and evaluate your understanding of the knowledge and skills required to answer the questions. I will provide an NES Study Record document for you to use for completing this course. After you take the diagnostic exam and quizzes throughout the course, complete a new row of the "Study Record" for any questions you answered incorrectly. This process ensures that you are identifying and reviewing the mathematics knowledge and skills you need.

### Pass NES Practice Exam

After you have completed all 16 competency checkpoints, review your NES Study Record and take a practice NES exam. You will have 2 hours to complete 75 questions on the sample NES Exam and must answer 55 questions correct. If you do not pass this exam you will have the ability to take a second practice NES exam.

### Reflection on the Major

You will be asked to reflect on various components of the Math BA (problem solving and reasoning tasks, projects, and exams) and complete an end-of-program survey.

Assignment deadlines available in Canvas.

## Course Expectations

As a member of a peer learning community, a high degree of professionalism is necessary. CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events.

### Professional Participation

**Think critically.** People that analyze, infer, evaluate, and make reasoned judgments perform better, make better daily decisions, and have greater professional success. Ask questions to support your critical thinking process

**Apply yourself.** Success in this course will require considerable time and energy. If you have high learning expectations, that is what you will achieve. Expect to invest significant effort. Budget the time and energy needed to accommodate the workload.

**Be present.** Focus on learning by being an active participant. Show enthusiasm and bring a positive, energetic attitude.

**Act professionally.** Arrive to class on time and stay for the entire class. Respect everyone, treat each other with dignity, and encourage all to participate.

**Communicate clearly.** Effective written and oral communication is an important component of teaching. Clarity, proper format, spelling, and grammar are expected of every student.

**Use common sense.** Don't cheat on assignments, and don't plagiarize others' work – either will result in a zero and the possibility of disciplinary action by the university. If you have a problem that prohibits you from turning something in on time, let me know ahead of time. In all instances, good communication with me will prevent the vast majority of problems.

### Attendance Policy and Assignment Deadline Extensions

This course is asynchronous, so no in-person attendance is required.

You may submit a **deadline extension request** if you must submit an assignment past the deadline. Requests should (a) be submitted via email and (b) include a brief explanation as to why the assignment was unable to be completed on time. Assignments submitted late but with an approved extension will not receive any grading penalties.

University Policy [CWUP 5-90-040\(38\)](http://www.cwu.edu/resources-reports/cwup-5-90-040-academic-and-general-regulations#Class%20Attendance%20and%20Participation) (<http://www.cwu.edu/resources-reports/cwup-5-90-040-academic-and-general-regulations#Class%20Attendance%20and%20Participation>), provides for reasonable accommodation of student absences for religious holidays in accordance with [RCW 28B.137.010](https://apps.leg.wa.gov/rcw/default.aspx?cite=28B.137.010) (<https://apps.leg.wa.gov/rcw/default.aspx?cite=28B.137.010>). Students seeking reasonable accommodations under this policy must provide written notice to their instructors within the first two weeks of class specifying the dates for which religious accommodations are requested. Contact the Dean of Student Success at (509) 963-1515 for further information.

### Academic Honesty and Student Conduct

Consult university policies [CWUP 5-90-040\(25\)](http://www.cwu.edu/resources-reports/cwup-5-90-040-academic-and-general-regulations#Class%20Attendance%20and%20Participation) (<http://www.cwu.edu/resources-reports/cwup-5-90-040-academic-and-general-regulations#Class%20Attendance%20and%20Participation>), [CWUR 2-90-040\(24\)](http://www.cwu.edu/resources-reports/cwur-2-90-040-academic-and-general-regulations#Academic%20Dishonesty) (<http://www.cwu.edu/resources-reports/cwur-2-90-040-academic-and-general-regulations#Academic%20Dishonesty>), and [WAC 106-125-020](https://apps.leg.wa.gov/WAC/default.aspx?cite=106-125-020) (<https://apps.leg.wa.gov/WAC/default.aspx?cite=106-125-020>), for student conduct, cheating, plagiarism, and other academic expectations. CWU's policies and recommendations for academic misconduct will be followed, leading to disciplinary action up to and including failing the course.

Central Washington University is committed to providing all community members with a learning and work environment that is free from sexual harassment and assault. Students have options for getting help if they have experienced sexual assault, relationship violence, and sexual harassment, or stalking. Information can be found at <http://www.cwu.edu/wecare> (<http://www.cwu.edu/wecare>) and in [CWUP 2-35-050](http://www.cwu.edu/resources-reports/cwup-2-35-equal-opportunity-policies-and-programs#Harassment) (<http://www.cwu.edu/resources-reports/cwup-2-35-equal-opportunity-policies-and-programs#Harassment>): Sexual Harassment. Faculty are required to report information regarding sexual misconduct or related crimes. Students may speak to someone confidentially by contacting the CWU Wellness Center, 509-963-3213, or the CWU Student Counseling Clinic, 509-963-1391.

## Changes

I reserve the right to amend, adjust, or otherwise modify the syllabus at any time during the course.

