DESIGN OF SPECIALIZED MATHEMATICS COURSES FOR PRE-SERVICE TEACHERS

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Need for Specialized Courses

- Need for conceptual understanding
- Deeper knowledge of math that is taught in K-12
- Requirements for common core
- Challenges associated with traditional formats
Middle Level Courses at TTU

- Elementary sequence
  - College algebra
  - Elementary analysis
  - Elementary geometry
- Calculus
- Finite math
- Modeling
- Problem solving – number theory
- Computation/capstone course
Typical Sequences for Math Majors

- Calculus I, II, III
- Linear Algebra
- Differential Equations
- Advanced Geometry
- Advanced Calculus
- Abstract Algebra
- Statistics
- Computational Techniques
- (Number Theory, Complex Analysis, Numerical Analysis)
UTEACH TYPE COURSES

- Prep courses
- Research methods
- Functions and modeling
DEAL COURSES?

- Algebra
- Geometry
- Functions
- Calculus
- Computation
CONTACT INFORMATION

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