I. Course Description:

Examination of the mathematics curriculum for grades EC-6 with emphasis on current practices, trends, and research on effective practices for teaching mathematics. This course includes investigation of activities and materials appropriate for achieving mathematics objectives.

Pre-requisites: Admitted to Teacher Education; enrolled in ELE 450.

II. Program Learning Outcomes, Student Learning Outcomes and Assessment:

PLO 1 Candidates know, understand, and use the major concepts, principles, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students’ development, acquisition of knowledge, and motivation (ACEI 1; InTASC 1).

- SLO 1.1 Candidates implement developmental stages of childhood and early adolescence in instruction (ACEI 1; EC-6 Texas Mathematics Standard VI).
  - **SLO 1.1.1 Assessment** – Final Exam
    - PPR Standards: 1.6k (TS2BiII), 1.17k, 1.18k, 1.19k, 1.28k, 1.5s, 1.11s (TS3BiII), 1.21s (TS1CII), 2.1k (TS4AiII), 2.2k (TS4AiIII), 2.3k, 2.4k, 2.5k, 2.8k, 3.9k, 3.11k, 4.1k, 4.2k, 4.4k (TS5BiII; TS6Ci), 4.13s
    - Content Standards:
      - 5.2k, 5.5s, 5.8s, 5.17s, 5.18s, 5.20s, 6.3k, 6.4k, 6.7k, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 8.1k, 8.2k, 8.3k, 8.4k, 8.5k, 8.6k, 8.7k, 8.7s, 9.6k, 9.7k
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7c)
  - **SLO 1.1.2 Assessment** – Content Module exams/quizzes
    - PPR Standards: 1.11s (TS3BiIII), 2.1k (TS4AiII), 2.2k (TS4AiIII), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1DII; TS1EII), 3.10s
    - Content Standards:
      - 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3BiII), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.12s, 5.13s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.10k, 7.5s, 8.1k, 8.2k, 8.3k, 8.4k, 8.5k, 8.6k, 8.7k, 8.1s, 8.3s, 8.4s, 8.5s, 8.6s, 8.7s
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  - **SLO 1.1.3 Assessment** – Content Module Discussions
    - PPR Standards: 1.18k, 1.11s (TS3BiIII), 2.1k (TS4AiII), 2.2k (TS4AiIII), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1DII; TS1EII), 4.1k
    - Content Standards:
      - 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3BiII), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.5s, 9.7s
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  - **SLO 1.1.4 Assessment** – Mathematics Career Carnival
    - PPR Standards: 1.6k (TS2BiII), 1.18k, 1.19k, 1.1s (TS1BiII), 1.4s, 1.5s, 1.6s (TS3BiII), 1.11s (TS3BiIII), 1.12s, 1.13s, 1.14s (TS2BiII), 1.21s (TS1CII), 1.22s, 2.2k (TS4AiIII), 2.3k, 2.4k, 2.5k, 2.8k, 2.7s (TS4DIIii), 2.8s (TS4DIIii), 2.9s, 3.3k, 3.9k, 3.11k, 3.1s, 3.6k (TS1DII), 3.7s, 3.8s, 3.9s (TS1EII), 3.10s, 4.13s
    - Content Standards:
      - 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3BiII), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.13s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
    - ISTE Standards: Learner (1a, 1c); Leader (2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  - **SLO 1.1.5 Assessment** – Literature Project
    - PPR Standards: 1.6k (TS2BiII), 1.11s (TS3BiIII), 2.1k (TS4AiII), 2.2k (TS4AiIII), 2.3k, 2.4k, 2.5k, 2.8k, 4.1k, 4.2k, 4.4s (TS5BiII; TS6Ci)
    - Content Standards:
      - 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.18k, 7.22s, 7.23s
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3d); Collaborator (4d); Designer (5a, 5b, 5c); Facilitator (6a,
SLO 1.2 Candidates know and understand major concepts, principles, theories, and research to select current best practices for mathematics instruction.

SLO 1.2.4 Assessment

Content Standards:
- SLO 1.2.4.1: Onthesu (5.5s, 5.6s, 5.7s, 5.8s, 5.12s, 5.17s, 5.20s, 5.21s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.18s, 7.21s, 9.7s)
- ISTE Standards: Learner (1a, 1c); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

SLO 1.2.6 Assessment – Games Project

PPR Standards:
- 1.6k (TS2BiIIi), 1.18k, 1.19k, 1.1s (TS1BiI), 1.4s, 1.5s, 1.6s (TS3BiI), 1.11s (TS3BiIIi), 1.12s, 1.13s, 1.14s (TS2BiI), 1.21s (TS1CiII), 1.22s, 3.1s, 3.8s, 3.9s (TS1Eii), 3.10s, 4.1k, 4.2k, 4.4s (TS5BiI; TS6Ci)

Content Standards:
- 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3BiI), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 5.21s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.18s, 7.21s, 9.7s
- ISTE Standards: Learner (1a); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

SLO 1.2.7 Assessment – Visual Vocabulary

Content Standards: 7.1k, 7.18k, 7.16s, 7.24s

ISTE Standards: Learner (1a)

SLO 1.2.8 Assessment – Literature Project

PPR Standards:
- 1.6k (TS2BiIIi), 1.11s (TS3BiIIi), 2.1k (TS4AiI), 2.2k (TS4AiII), 2.3k, 2.4k, 2.5k, 2.8k, 4.1k, 4.2k, 4.4s (TS5BiI; TS6Ci)

Content Standards: 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.18k, 7.22s, 7.23s

ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3d); Collaborator (4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c); Analyst (7c)
• SLO 1.3 - candidates will examine the history, structure, and evolving nature of mathematics and its effects on society and today's mathematics classroom (EC6 Texas Mathematics ST VI).
  o SLO 1.3.1 Assessment – Mathematics Personification
    ▪ PPR Standards: 1.1a, 1.1b, 1.2a, 1.6s (TS3Bi), 1.11s (TS3Bii), 2.1k (TS4Aii), 2.2k (TS4Aiii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Di), 3.10s, 4.13s
    ▪ Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.11s, 5.13s, 5.14s, 5.20s, 6.3s, 6.2s, 6.5s, 7.1k, 7.2k, 7.3k, 7.4k, 7.17k, 7.19k, 7.5s, 7.16s, 7.22s, 7.23s, 7.24s, 9.1k, 9.2k, 9.3k, 9.4k, 9.5k, 9.6k, 9.7k, 9.1s, 9.2s, 9.3s, 9.4s, 9.5s, 9.6s
    ▪ ISTE Standards: Learner (1a), Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

PLO 2 Candidates know, understand, and demonstrate a high level of competence in their content in the areas of English language arts, mathematics, science, and social studies (ACEI 2; InTASC 4).
• SLO 2.1 Candidates know, understand, and use the major concepts and procedures that define number and operations, algebra, geometry, measurement, and data analysis and probability (EC-6 Texas Mathematics ST I, II, III, IV, V).
  o SLO 2.1.1 Assessment – EC6 Department Content Practice Exam
    ▪ Content Standards: 9.6k
  o SLO 2.1.2 Assessment – TexES EC6 Content Exam
    ▪ Content Standards: 9.6k
  o SLO 2.1.3 Assessment – Mathematics Pre-Test
    ▪ Content Standards: 1.3s, 1.12s, 5.2k, 5.3s, 5.6s, 5.13s, 5.21s
    ▪ ISTE Standards: Citizen (3a, 3c, 3d); Analyst (7c)

PLO 3 Candidates use their knowledge of students, learning, curriculum, environment, diversity, communication, and community to plan and implement collaborative engaging, thought provoking, inquiry-based instruction to meet the needs of all learners (ACEI 3; InTASC 2, 3, 5, 7, 8; ISTE ST II).
• SLO 3.1 Candidates select and create learning experiences that are appropriate for curriculum goals, meaningful to elementary students, and based upon principles of effective mathematics teaching (e.g. activate students’ prior knowledge, anticipate preconceptions, encourage exploration and problem-solving, and build new skills on those previously acquired) - (EC-6 Texas Mathematics ST VII; ISTE ST II).
  o SLO 3.1.1 Assessment – Kamii Video Reflection Discussion
    ▪ PPR Standards: 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1D); 3.10s
    ▪ Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.5s
    ▪ ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  o SLO 3.1.2 Assessment – Problem Solving Quiz
    ▪ PPR Standards: 3.4s (TS1D); 3.10s
    ▪ Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.10k, 7.5s
    ▪ ISTE Standards: Learner (1a); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  o SLO 3.1.3 Assessment – Mathematics Career Carnival
    ▪ PPR Standards: 1.6k (TS2Bii), 1.18k, 1.19k, 1.1s (TS1B), 1.4s, 1.5s, 1.6s (TS3Bii), 1.11s (TS3Bii), 1.12s, 1.13s, 1.14s (TS2Bii), 1.21s (TS1C), 1.22s, 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 2.7s (TS4Dii), 2.8s (TS4Dii), 2.9s, 3.3k, 3.9k, 3.11k, 3.1s, 3.6s (TS1Dii), 3.7s, 3.8s, 3.9s (TS1Eii), 3.10s, 4.13s
    ▪ Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
    ▪ ISTE Standards: Learner (1a, 1c); Leader (2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
  o SLO 3.1.4 Assessment – Profile of a Mathematics Teacher
    ▪ PPR Standards: 1.17k, 1.19k, 1.28k, 1.6s (TS3Bii), 1.11s (TS3Bii), 2.1k (TS4Aii), 2.2k (TS4Aiii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Dii); 3.10s, 4.13s
    ▪ Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.18k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
    ▪ ISTE Standards: Learner (1a, 1c); Leader (2a, 2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)
• SLO 3.2 Candidates demonstrate knowledge of mathematical strategies appropriate for young
1.17k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s

ISTE Standards: Learner (1a); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analytist (7a, 7b, 7c)

**SLO 3.3** Candidates explore and use a variety of appropriate instructional strategies for students in grades EC-6 (e.g. using models, children's literature, and everyday experiences) (EC-6 Texas Mathematics ST VII).

**SLO 3.3.1 Assessment – Literature Project**

- **PPR Standards:** 1.6k (TS2Bii), 1.11s (TS3Bi), 2.1k (TS4Ai), 2.2k (TS4Aii), 2.3k, 2.4k, 2.8k, 4.1k, 4.2k, 4.4s (TS5Biii; TS6Ci)
- **Content Standards:** 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.18k, 7.22s, 7.23s
- **ISTE Standards:** Learner (1a); Leader (2a, 2c); Citizen (3d); Collaborator (4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c); Analytist (7c)

**SLO 3.3.2 Assessment – Visual Vocabulary**

- **PPR Standards:** 1.6k (TS2Bii), 1.11s (TS3Bi), 2.1k (TS4Ai), 2.2k (TS4Aii), 2.3k, 2.4k, 2.8k, 4.1k, 4.2k, 4.4s (TS5Biii; TS6Ci)
- **Content Standards:** 1.17k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
- **ISTE Standards:** Learner (1a); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analytist (7a, 7b, 7c)

**SLO 3.3.3 Assessment – Games Project**

- **PPR Standards:** 1.6k (TS2Bii), 1.11s (TS3Bi), 2.1k (TS4Ai), 2.2k (TS4Aii), 2.3k, 2.4k, 2.8k, 4.1k, 4.2k, 4.4s (TS5Biii; TS6Ci)
- **Content Standards:** 1.17k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
- **ISTE Standards:** Learner (1a, 1c); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analytist (7a, 7b, 7c)

**SLO 3.3.4 Assessment – Mathematics Career Carnival**

- **PPR Standards:** 1.6k (TS2Bii), 1.11s (TS3Bi), 2.1k (TS4Ai), 2.2k (TS4Aii), 2.3k, 2.4k, 2.8k, 4.1k, 4.2k, 4.4s (TS5Biii; TS6Ci)
- **Content Standards:** 1.17k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
- **ISTE Standards:** Learner (1a); Leader (2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analytist (7a, 7b, 7c)
- ISTE Standards: Learner (1a, 1c); Leader (2a, 2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

**PLO 4** Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate, and strengthen instruction to promote continuous intellectual, social, emotional, and physical development of all children (ACEI 4; InTASC 6).
- SLO 4.1 Candidates examine various options for informal assessment of the young child/adolescent (EC-6 Texas Mathematics ST VIII).
  - **SLO 4.1.1 Assessment** – Games Project
    - PPR Standards: 1.6k (TS2Bii), 1.18k, 1.19k, 1.15s (TS1Bii), 1.4s, 1.5s, 1.6s (TS3Bii), 1.11s (TS3Bii), 1.12s, 1.13s, 1.14s (TS2Bii), 1.21s (TS1Cii), 1.22s, 3.13s, 3.18s, 3.3s (TS1Eii), 3.10s, 4.1k, 4.2k, 4.4s (TS5Biii; TS6C)
    - Content Standards: 1.1k, 2.1k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Biii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
    - ISTE Standards: Learner (1a, 1c); Leader (2a, 2b); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

  - **SLO 4.1.2 Assessment** – Mathematics Career Carnival
    - PPR Standards: 1.6k (TS2Bii), 1.18k, 1.19k, 1.15s (TS1Bii), 1.4s, 1.5s, 1.6s (TS3Bii), 1.11s (TS3Bii), 1.12s, 1.13s, 1.14s (TS2Bii), 1.21s (TS1Cii), 1.22s, 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 2.7s (TS4Bii), 2.8s (TS4Dii), 2.9s, 3.3k, 3.9k, 3.11k, 3.1s, 3.6s (TS1Dii), 3.7s, 3.8s, 3.9s (TS1Eii), 3.10s, 4.13s
    - Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Biii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
    - ISTE Standards: Learner (1a, 1c); Leader (2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

- **PLO 4.2** Candidates demonstrate understanding of mathematical assessment of the development of young children and young adolescents (EC-6 Texas Mathematics ST VIII).
  - **SLO 4.2.1 Assessment** – Rex Video Initial Thoughts
    - PPR Standards: 2.1k (TS4Aii), 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Dii; TS1Eii)
    - Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.5s
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

  - **SLO 4.2.2 Assessment** – Assessing Student Learning Quiz
    - PPR Standards: 2.1k (TS4Aii)
    - Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.5s, 8.1k, 8.2k, 8.3k, 8.4k, 8.5k, 8.6k, 8.7k, 8.1s, 8.3s, 8.4s, 8.5s, 8.6s, 8.7s
    - ISTE Standards: Learner (1a); Leader (2a); Citizen (3a, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

  - **SLO 4.2.3 Assessment** – Kamii Video Reflection Discussion
    - PPR Standards: 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Dii; TS1Eii)
    - Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bii), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.20s, 7.1k, 7.2k, 7.3k, 7.4k, 7.6k, 7.5s
    - ISTE Standards: Learner (1a); Leader (2a, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

**PLO 5** Candidates know, implement, evaluate, and reflect upon research-based teaching, professional ethics, and professional learning resources to establish and maintain positive, collaborative relationships with families, colleagues, professional organizations, and community agencies to promote the intellectual, social, emotional, physical growth, and well-being of all children (ACEI 5; InTASC 9, 10).
- **SLO 5.1** Candidates apply knowledge of the EC6 TExES Competencies. (TExES PPR)- (ACEI 5; Mathematics Generalist EC-6 Standard 9; PLO 5).
  - **SLO 5.1.1 Assessment** – T-Cert EC6 content examination preparation and provide a certificate of completion (OPTIONAL) (ACEI 5; Mathematics Generalist EC-6 Standard 9; PLO 5).
    - Content Standards: 9.6k

- **SLO 5.2** Candidates understand the value of positive/productive communication with families/administration (ACEI 5; Mathematics Generalist EC-6 Standard 9; PLO 5).
  - **SLO 5.2.1 Assessment** – Profile of a Mathematics Teacher
    - PPR Standards: 1.17k, 1.19k, 1.28k, 1.6s (TS3Bii), 1.11s (TS3Bii), 2.1k (TS4Aii), 2.2k (TS4Aii), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Dii; TS1Eii), 3.10s, 4.13s

5
- Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.18k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
- ISTE Standards: Learner (1a, 1c); Leader (2a, 2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

- SLO 5.3 Candidates will explore the importance of being a reflective practitioner committed to continuous professional growth and development in the teaching of mathematics (ACEI 5; Mathematics Generalist EC-6 Standard 9; PLO 5)

  - SLO 5.3.1 Assessment – Final Exam
    - PPR Standards: 1.6k (TS2Bii), 1.17k, 1.18k, 1.19k, 1.28k, 1.5s, 1.11s (TS3Bii), 1.121s (TS1Cii), 2.1k (TS4Ai), 2.2k (TS4Ai), 2.3k, 2.4k, 2.5k, 2.6k, 3.9k, 3.11k, 4.1k, 4.2k, 4.4s (TS5Bii; TS6Cl), 4.13s
    - Content Standards: 5.2k, 5.5s, 5.8s, 5.17s, 5.18s, 5.20s, 6.3k, 6.4k, 6.7k, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 8.1k, 8.2k, 8.3k, 8.4k, 8.5k, 8.6k, 8.7k, 8.7s, 9.6k, 9.7k
- SLO 5.3.2 Assessment – Profile of a Mathematics Teacher
  - PPR Standards: 1.17k, 1.19k, 1.28k, 1.6s (TS3Bi), 1.11s (TS3Bii), 2.1k (TS4Ai), 2.2k (TS4Ai), 2.3k, 2.4k, 2.5k, 2.8k, 3.4s (TS1Dii; TS1Eii), 3.10s, 4.13s
  - Content Standards: 1.1k, 1.2k, 1.3k, 1.5k, 1.3s, 1.4s, 1.5s, 1.6s (TS3Bi), 1.8s, 1.9s, 1.10s, 1.12s, 5.1k, 5.2k, 5.3s, 5.4s, 5.5s, 5.6s, 5.7s, 5.8s, 5.17s, 5.19s, 5.20s, 5.21s, 6.6s, 7.1k, 7.2k, 7.3k, 7.4k, 7.10k, 7.11k, 7.12k, 7.18k, 7.1s, 7.2s, 7.4s, 7.5s, 7.7s, 7.12s, 7.14s, 7.15s, 7.18s, 7.21s, 9.7s
- ISTE Standards: Learner (1a, 1c); Leader (2a, 2b, 2c); Citizen (3a, 3b, 3c, 3d); Collaborator (4a, 4c, 4d); Designer (5a, 5b, 5c); Facilitator (6a, 6b, 6c, 6d); Analyst (7a, 7b, 7c)

ELE 303 is guided by:
National Council for Teachers of Mathematics (NCTM) Principles and Standards:
http://standards.nctm.org/document/appendix/data.htm#TOP and occurs in the same semester as the Field II experience.

III: Course Assignments, Activities, Instructional Strategies, Use of Technology

1. Quizzes/Reflections/Discussion Postings/Professionalism (PLO#1, 2, 3, 4; SLO# 1, 8)
   Quizzes over reading material and online discussion activities will be assigned throughout the semester. Quizzes will be based on assigned readings, videos, and/or content module pages. Reflections are submitted in the Dropbox area. Discussions are three (3) parts: Initial response to prompt and 2 responses to peers. Refer to Before Class Begins module for specific instructions/guidelines for Discussions. Professionalism requirements are listed in section IX.

2. Candidates are highly encouraged to complete the T-Cert EC6 preparation and submit a certificate of completion to the Dropbox: https://pact.tarleton.edu/TCERT/index.cfm for bonus points in the course. Any candidate that has already taken, and passed, the mathematics content exam, can submit proof of a passing score in order to receive the bonus points. In addition, every candidate will be required to complete a Math Pre-Test, analyze their results and upload the analysis to the Dropbox.

3. Games Project: (PLO# 1; SLO# 3, 6) Each candidate will create a mathematics-based game to use as an assessment with students. Some materials will be given during the SFA campus visit. Each candidate will create a game, pieces required to play, and directional guides (in the form of TeachersPayTeachers) to be used for student assessment and repetition of skills. A discussion board will be available for classmates to share their creations with each other in an effort to help everyone build resources for future classrooms.

4. Mathematics Personification (PLO# 1; SLO #3) Candidates will explore their own relationship with mathematics through writing.

5. Profile of a Mathematics Teacher (PLO# 3, 5; SLO# 5, 8) Candidates will plan various aspects of mathematics teaching, including what to teach, how to reach diverse students, connecting with other content, making mathematics connect to real-world problems, and communicating with families.

6. Literature Project (PLO# 3; SLO# 2, 4, 6) Candidates will use children’s literature to select a book
suitable for designing a problem-solving fluency activity and present the activity using a WORD, PPT, or Prezi presentation.

7. **Math Career Carnival (PLO # 1, 3, 4)** Candidates will create a carnival booth that connects mathematics instruction to its use in a career. Candidates will submit a proposal video showing their creations, which will be reviewed by the instructor of ELE 303, ELE 450 and the partnering school site for feedback. Candidates will return to Nacogdoches and work with a partnering school site to produce a Math Career Carnival for local students.

8. **Visual Vocabulary (PLO # 1, 3)** Candidates will create a poster that shows a connection between a mathematics vocabulary word and a visual display of the definition. The Visual Vocabulary assignments will be added to a class shared Padlet (www.padlet.com). In addition, candidates will record a short explanation of how their picture displays the definition of the chosen word.

9. **Final Exam (PLO# 1, 3, 4, 5; SLO# 1-8)** Candidates will use the information learned from the course material, course discussions, course assignments, and personal research to construct an argument to defend their beliefs about the teaching, learning, and assessing of mathematics.

**IV. Evaluation and Assessments (Grading):**

Grades will be assigned per the percentage of total points a teacher candidate earns. Candidates are responsible for keeping their own records of graded work and exam scores; however, grades are posted in D2L. The following are examples of activities/assignments that will be graded. Refer to the course modules and separate timeline for an inclusive list; however, the total possible points will be changed if assignments are altered. Assignments will be altered to meet assessed student need when appropriate. No extra assignments will be made; existing assignments may be revised.

1. **Quizzes (PLO# 1, 2, 3, 4, 5; SLO# 1-8)**
   a. Before Class Begins (10 pts.)
   b. Three Kinds of Knowledge (5 pts.)
   c. Share and Compare 1 (25 pts.)
   d. Share and Compare 2 (15 pts.)
   e. The Leg Problem (10 pts.)
   f. Share and Compare 3 (10 pts.)
   g. How Numbers Work & Early Number Sense (20 pts.)
   h. Assessing Student Learning (10 pts.)
   i. Problem Solving (20 pts.)
   j. **Number Sense Routines**
      a. Number Sense: What Does It Mean? (5 pts.)
      b. Improving Number Sense: Routines that are Not Routinized (10 pts.)
      c. Visual Routines: Seeing and Conceptualizing Quantities (15 pts.)
      d. Counting Routines: Understanding Place Value and the Number System (15 pts.)
      e. Playing with Quantities: Making Sense of Numbers and Relationships (15 pts.)
      f. Calendar and Data Routines: Using Numbers Every Day (15 pts.)
      g. Learning from Each Other: Building a Strong Community of Learners Through Math Talk, Mistakes, and Reflections (10 pts.)
      h. Planning Responsive Number Sense Routines (10 pts.)
      i. A Place to Begin (5 pts.)

2. **Discussion Board Postings (PLO# 2; SLO# 1, 8)**
   a. Share and Compare Concluding Thoughts (35 pts.)
   b. Kamii Video Reflection (35 pts.)
   c. Using Games to Teach/Assess (35 pts.)

3. **Dropbox Assignments**
   a. Mathematics Pre-Test Analysis (25 pts.) (PLO # 2)
   b. EC6 TCERT Course Certificate (2 BONUS pts.) (PLO# 5; SLO# 5.1)
   c. Mathematics Personification (PLO #1; SLO #3) (20 pts.)
   d. Literature Project (25 pts.) (PLO# 3; SLO# 3)
e. Rex Video Initial Thoughts-Viewing Reflection (10 pts) (PLO# 2; SLO# 1, 8)
f. Supporting Children’s Thinking – Rex Reflection (10 pts.) (PLO# 2; SLO# 1, 8)
g. Games Project (40 pts.) (PLO# 1; SLO# 3, 6)
h. Mathematics Career Carnival Progress Checks (PLO# 1, 3, 4):
   a. #2: TEKS TO CAREER (2 pts.)
   b. #3: TEKS TO CAREER TO CLASSROOM (2 pts.)
i. Profile of a Mathematics Teacher (40 pts.) (PLO# 3, 5)
4. Other Assignments
   a. Visual Vocabulary (added to Padlet) (15 pts.) (PLO# 1, 3)
   b. Mathematics Career Carnival Progress Check (PLO# 1, 3, 4):
      a. #1: TEKS (completed during campus visit) (2 pts.)
      b. #4: TEKS TO CAREER TO CLASSROOM TO CARNIVAL (video submitted to Flipgrid) (2 pts.)
      c. #5: Teacher Take-Away Sheet (submitted to ELE 450 instructor) (2 pts.)
   c. Mathematics Career Carnival Event (PLO# 1, 3, 4):
      a. Mathematics Career Carnival Project and Participation (140pts.)
5. Final Exam (PLO# 1,2,3,4,5; SLO# 1-8)
   a. Dear Teacher… (50 pts.)
6. Professionalism (15 pts.) (PLO# 2; SLO# 1, 8)
   a. Class participation, timely submissions, LiveText profile, following written instructions in each module, being self-disciplined (logging in regularly, being responsible) with attendance and timely submissions] Should a teacher candidate use all professionalism points, and the need for more points to be used exists, then points will be subtracted from the final total points.

Total Possible Points are based on #s 1 – 6. The point total and points needed for an A, B, C, D or F will be adjusted to meet the quizzes/activities/discussions/assignments assigned and completed. Candidates are expected to complete assignments on or before the due date shown on the Tentative Course Timeline. To be eligible to receive an “A” in the course, ALL assignments must be completed and submitted on, or before the due date, or the final course grade may be subject to a reduction of the earned course grade by one letter grade, regardless of the total number of points earned (Turning in assignments late or missing quizzes will prevent you from earning an “A” in ELE 303). Your final grade will be LOWERED one (1) letter grade if more than one assignment is late and/or you neglect to submit ALL assignments.

**Late Work & Professionalism Points**
1. First late assignment – accepted without penalty or loss of professionalism point.
2. Every subsequent assignment will be accepted with a 15% late penalty as long as the assignment is submitted within 7 calendar days of original due date. Assignments not submitted within 7 days will not be accepted for grading.
3. For every two late assignments submitted, the candidate will lose one professionalism point.
4. Deduction of other professionalism points may be at the discretion of the instructor based on course participation or if the student engages in unethical practices (cheating, plagiarism, etc.)

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<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Earned Points</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
<td>653 - 730</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89%</td>
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<td>C</td>
<td>75 – 79%</td>
<td>544 - 579</td>
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<tr>
<td>D</td>
<td>70 – 74%</td>
<td>507 - 543</td>
</tr>
<tr>
<td>E</td>
<td>69% or fewer</td>
<td>0 - 506</td>
</tr>
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</table>

**REQUIREMENTS FOR ADVANCEMENT IN TEACHER EDUCATION**
To take the next course(s) in the professional teacher education sequence, departmental policy requires that students maintain a G.P.A. of 2.5 or better (the same as required for admission to Teacher Education). Students failing to maintain at least a 2.5 G.P.A. will be dropped from professional education courses. In addition, Teacher candidates must score 75% or higher of the total points possible to PASS ELE 303 to be eligible to move forward into Student Teaching.
V. Tentative Course Outline:
Also see course timeline in the Syllabus and Policies module in the D2L Content modules. Revisions (if any) will be posted under the Syllabus and Policies module, not in the syllabus.
*This timeline may be revised to meet assessed student need during the semester. NO additional assignments will be added.

This is the official timeline for this course. Refer to it frequently to stay current on due dates/deadlines. It is a good idea to print this timeline, have it readily available, and mark your personal calendar with due dates/deadlines. All Dropbox assignments and Quizzes are due on Sundays by 11:30 PM, CST. Initial discussion posts in response to a discussion prompt are due no later than Thursdays by 11:30 PM CST and a minimum of two (2) responses to peers are due on Sundays by 11:30 PM, CST.

Tentative Course Timeline for ELE 303.501

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Module Activities</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Getting Started</td>
<td>• Read Week 1 Modules: *Before Class Begins, Syllabus &amp; Timeline, APA, Mathematics Pre-Test, EC-6 TExES Competency Course&lt;br&gt;• Read and print Syllabus and Timeline &amp; mark your calendar with due dates&lt;br&gt;• EC-6 TExES Competency Course (Due during Week 3)&lt;br&gt;• Take Before Class Begins Quiz&lt;br&gt;• Take Mathematics Skills Pre-Test</td>
<td>• Before Class Begins Quiz due by September 2 @ 11:30pm&lt;br&gt;• Math Pre-Test Form due in LiveText by September 2 @ 11:30pm&lt;br&gt;• Math Pre-Test Analysis due in Dropbox by September 2 @ 11:30pm</td>
</tr>
<tr>
<td>Week 2</td>
<td>Standards for Teaching Mathematics</td>
<td>• Read Week 2 Module: *Standards for Teaching Mathematics&lt;br&gt;• Take 3 Kinds of Knowledge Quiz&lt;br&gt;• EC-6 TExES Competency Course (Due during Week 3)</td>
<td>• 3 Kinds of Knowledge Quiz due by September 9 @ 11:30pm&lt;br&gt;• *Mathematics Personification Project due in Dropbox by September 9 @ 11:30pm</td>
</tr>
<tr>
<td>Week 3</td>
<td>SFA Campus Visit</td>
<td>• No module activities during the SFA Campus visit</td>
<td>• Mathematics Career Carnival Progress Checks:&lt;br&gt;  ○ #1: <em>TEKS</em> – due September 14 (complete during Campus Visit)&lt;br&gt;  • EC-6 TExES Competency Course Certificate of Completion due in Dropbox by September 16 @ 11:30pm</td>
</tr>
</tbody>
</table>
**Week 4**
September 17-21

**Number Sense Routines**

- Read Week 4-6 Module: Number Sense
  - Read Number Sense Routines: Building Numerical Literacy Every Day in Grades 1-3 by Jessica F. Shumway
- Following the reading of each chapter, take the corresponding quiz:
  - Chapter 1: Number Sense: What Does It Mean?
  - Chapter 2: Improving Number Sense: Routines That Are Not Routinized
  - Chapter 3: Visual Routines: Seeing and Conceptualizing Quantities
  - Chapter 4: Counting Routines: Understanding Place Value and the Number System
  - Chapter 5: Playing with Quantities: Making Sense of Numbers and Relationships
  - Chapter 6: Calendar and Data Routines: Using Numbers Every Day
  - Chapter 7: Learning from Each Other: Building a Strong Community of Learners Through Math Talk, Mistakes, and Reflections
  - Chapter 8: Planning Responsive Number Sense Routines
  - Conclusion: A Place to Begin

**Week 5**
September 24-28

**Teaching Mathematics in Elementary School Part 1**

- Read Week 7 Module: Teaching Mathematics in Elementary School Part 1
- Read Share & Compare pgs. vi-9 (read through “Is it possible to use your approach without extensive teacher training?” section)
- Share & Compare Part 1 Quiz (covers pages vi-9 INCLUDING “A List of Questions” on pages vi, vii)

**Week 6**
October 1-5

**Teaching Mathematics in Elementary School Part 2**

- Read Week 8 Module: Teaching Mathematics in Elementary School Part 2
- Read Share & Compare pgs. 9-17 (begin reading “How does the share-and-Compare model play out when children actually use it in the classroom?”)
- The Leg Problem Quiz
- Share & Compare Part 2 Quiz

**Week 7**
October 8-12

**Teaching Mathematics in Elementary School Part 2**

- Share & Compare Part 1 Quiz due by October 14 @ 11:30pm
- Visual Vocabulary Project added to class Padlet by October 14 @ 11:30pm (you MUST send Dr. M an email with your preferred email address to be added as a contributor to the Padlet, otherwise you will not be able to post your assignment)

**Week 8**
October 15-19

**Teaching Mathematics in Elementary School Part 2**

- The Leg Problem Quiz due by October 21 @ 11:30pm
- Share & Compare Part 2 Quiz due by October 21 @ 11:30pm
- Literature Project due by October 21 @ 11:30pm
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| Week 9 | October 22-26 | Teaching Mathematics in Elementary School Part 3 | - Read Week 9 Module: *Teaching Mathematics in Elementary School* Part 3  
- Read Share & Compare pgs. 38-58  
- Share & Compare Part 3 Quiz  
- Share & Compare Concluding Thoughts Discussion  
- Share & Compare Part 3 Quiz due by October 28 @ 11:30pm  
- Participate in Share & Compare Concluding Thoughts *Discussion Board (Initial post due by October 25 @ 11:30pm – Two responses to peers due by October 28 @ 11:30pm)  
- Mathematics Career Carnival Progress Checks:  
  - #4: TEKS TO CAREER TO CLASSROOM TO CARNIVAL – due in Dropbox by October 28 @ 11:30pm |
|        |             | How Numbers Work and Early Number Sense    | - Read Week 10 Module: *How Numbers Work and Early Number Sense*  
- How Numbers Work and Early Number Sense Quiz  
- How Numbers Work and Early Number Sense Quiz due by November 4 @ 11:30pm |
| Week 11| November 5-9 | Assessing Student Learning                 | - Read Week 11 Module: *Assessing Student Learning*  
- View Rex video (embedded in module)  
- View Rex Video – Initial Thoughts  
- Read “Supporting Children’s Problem Solving” article (embedded in module – will not show up until you upload Rex Video Initial Thoughts into the Dropbox)  
- Supporting Children’s Thinking – Rex Reflection  
- Assessing Student Learning Quiz  
- Read Share & Compare pgs. 82-91  
- Rex Video Initial Thoughts due in Dropbox by November 11 @ 11:30pm  
- Supporting Children’s Thinking – Rex Reflection due in Dropbox by November 11 @ 11:30pm  
- Assessing Student Learning Quiz due by November 11 @ 11:30pm |
| Week 12| November 12-16 | Problem Solving                        | - Read Week 12 Module: *Problem Solving*  
- View First Graders Divide 62 by 5 video (embedded in module)  
- Kamii Video Reflection *Discussion  
- Problem Solving Quiz  
- Participate in Kamii Video Reflection *Discussion Board (Initial post due by November 15 @ 11:30pm – Two responses to peers due by November 18 @ 11:30pm)  
- Problem Solving Quiz due by November 18 @ 11:30pm  
- Games Project due in Dropbox by November 18 @ 11:30pm |
|        |             | Mathematics Career Carnival              | - Participate in Mathematics Career Carnival at Central Heights Elementary School (Central Heights ISD – Nacogdoches, TX)  
- Mathematics Career Carnival – Central Heights Elementary School – November 30, 2018 |
| Week 13| November 26-30 |                             | - Participate in Using Games to Teach/Assess *Discussion Board (Initial post due by December 6 @ 11:30pm – Two responses to peers due by December 9 @ 11:30pm)  
- Profile of a Mathematics Teacher due in Dropbox by December 9 @ 11:30pm |
| Week 14| December 3-7  | Using Games to Assess and Support         | - Read Week 13 Module: *Using Games to Assess and Support*  
- Using Games to Teach/Assess Discussion  
- Final Exam due in Dropbox by December 14 @ 11:30pm |
| Week 15| December 10-14 | Approaches for Teaching Math Final Exam   | - Read Week 16 Module: *Final Exam* |

*Discussion Board Forums:* All discussions (DB) have three (3) parts—1) each student's initial response to the discussion prompt, and 2) a minimum of two (2) responses to two different course mates’ initial responses. Initial responses AND both responses to peers MUST use citations from course materials or related resources to support claims. Initial responses should be posted no later than Thursdays at 11:30pm, Central Standard Time (CST). Responses to peers’ initial posts should be posted no later than
Weeks: ELE 303 modules are current for one week beginning on Monday and continuing through Sunday; other than initial discussions, most assignments are not due until 11:30pm CST on Sunday evenings. Assignments submitted after the due date will be penalized 15%. Acceptance of late work is at the discretion of the instructor. Late work will not be accepted one week past the original due date of the assignment without prior instructor approval. No late work will be accepted Dead Week or Finals Week without written permission from the instructor attached. There will be no exceptions.

VI. Readings: (Required and recommended – including texts, websites, articles, etc.)

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<th>REQUIRED:</th>
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<tr>
<td>Number Sense Routines by Jessica F. Shumway</td>
<td>Share and Compare by Larry Buschman</td>
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<tr>
<td>This text is available through NCTM for 27.95. The member price is 22.35.</td>
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Access to:
- [http://www.tea.state.tx.us/teks/index.html](http://www.tea.state.tx.us/teks/index.html) (Texas Education Agency, TEKS website)

Articles as assigned within the course. All are embedded in the course but could be located on the Internet or found in the SFA campus library.

**FEM Statement:**
In this course you must purchase and activate the LiveText add-on, Field Experience Module (FEM), PRIOR to your first day of field experience/clinical teaching. Failure to purchase and activate the account and/or submit the required assignment(s) within the FEM system may result in course failure. FEM must be purchased from [www.livetext.com](http://www.livetext.com) for a fee of $18.00.

**LiveText Statement:**
This course uses the LiveText data management system to collect critical assessments for students who are Perkins College of Education majors (undergraduate, graduate, and doctoral) or majors in other colleges seeking educator certification through the Perkins College of Education. Students who do not have an existing LiveText account will receive an access code via the SFA email system within the first week of class. You will be required to register your LiveText account, and you will be notified how to do this via email. If you forward your SFA e-mail to another account and do not receive an e-mail concerning LiveText registration, please be sure to check your junk mail folder and your spam filter for these e-mails.

If you have questions about obtaining or registering your LiveText account, call ext. 1267 or e-mail [SFALiveText@sfasu.edu](mailto:SFALiveText@sfasu.edu). Once LiveText is activated, if you have technical questions, call ext. 7050 or e-mail [livetext@sfasu.edu](mailto:livetext@sfasu.edu). Failure to activate the account and/or submit the required assignment(s) within the LiveText system may result in course failure.

**T-CERT**
$30 - Optional

Supplemental Resources/Suggested Readings:

**Journals**
- *Exceptional Children*, Council for Exceptional Children — [www.cec.sped.org](http://www.cec.sped.org)
- *Young Children*, National Association for the Education of Young Children — [http://www.naeyc.org](http://www.naeyc.org)

**Other Resources**


Texas Education Agency. (2009). *Texas essential knowledge and skills (TEKS)*.


**Online Resources**
- National Council of Teachers of Mathematics (www.nctm.org)
- American Mathematical Society — www.ams.org
- Association for Women in Mathematics — www.awm-math.org
- Internet4Classrooms — www.internet4classrooms.com
- The Mathematical Association of America — www.maa.org
- National Association of Mathematicians — www.nam-math.org
- National Council of Teachers of Mathematics — www.nctm.org
- Pearson Prentice Hall — www.phschool.com
- Pearson Welcome K–12 AP Teacher! — www.pearsonhighered.com/educator/K-12_AP_teacher.page
- Texas Council of Teachers of Mathematics — www.tctmonline.org

**VII. Course Evaluations:**

Near the conclusion of each semester, students in the Perkins College of Education electronically evaluate courses taken within the PCOE. Evaluation data is used for a variety of important purposes including:

1. Course and program improvement, planning, and accreditation;
2. Instruction evaluation purposes; and
3. Making decisions on faculty tenure, promotion, pay, and retention.

*As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the PCOE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!*

In the Perkins College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous, and will not be available to the instructor until after final grades are posted.

**VIII. Student Ethics and Other Policy Information (found at https://www.sfasu.edu/policies):**

**Class Attendance and Excused Absence (Policy 6.7)**

Regular, punctual attendance, documented participation, and, if indicated in the syllabus, submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor shall maintain an accurate record of each student’s attendance and participation as well as note this information in required reports (including the first 12-day attendance report) and in determining final grades. Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up to three weeks of absences during a semester or one week of a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

Assignments submitted after the due date will not receive full credit. No assignments are accepted after one week past the due date without PRIOR permission from the instructor of record. Late assignments are automatically assessed a 15% penalty before grading. Assignments submitted after 7 days of being late will not be graded, unless prior arrangements have been made with instructor.

Absences/tardiness and late work can adversely affect your grade in this course. Class participation will
be noted during each module of the course. Teacher candidates must make every effort to log in and participate in the online course at least once daily. Professionalism points will be deducted for inappropriate online demeanor or behavior. Points may also be reduced for consistent late work per instructor discretion. All teacher candidates are expected to attend all face-to-face class meetings as scheduled (one SFA campus visit per semester). An additional face-to-face meeting will be included (Math Career Carnival), but alternative arrangements will be made for students unable to return to campus for the event. Missing class/assignments negatively affects the final course grade. The final course grade may be lowered one letter grade from the earned grade for excessive absences/missed assignments as determined by the instructor of record.

**Academic Accommodation for Students with Disabilities (Policy 6.1 and 6.6)**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 936-468-3004 as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/)

**Student Academic Dishonesty (Policy 4.1)**
Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Faculty members must promote the components of academic integrity in their instruction, and course syllabi are required to provide information about penalties for cheating and plagiarism, as well as the appeal process.

**Definition of Academic Dishonesty**
Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:
- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment; and/or;
- helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to:
- submitting an assignment as one’s own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or;
- incorporating the words or ideas of an author into one’s paper or presentation without giving the author credit.

**Penalties for Academic Dishonesty**
Penalties may include, but are not limited to reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university.

**Student Appeals**
A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).

**Withdrawn Grades (Policy 5.5)**
At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Student Code of Conduct (Policy 10.4)**
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be
tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This policy applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare: Early Alert Program at SFA. Information regarding the iCare program is found at https://www.sfasu.edu/judicial/earlyalert.asp or by calling the office at 936-468-2703.

Additional Information:

**Code of Ethics for the Texas Educator:**
The Texas educator shall comply with standard practices and ethical conduct toward students, professional colleagues, school officials, parents, and members of the community and shall safeguard academic freedom. The Texas educator, in maintaining the dignity of the profession, shall respect and obey the law, demonstrate personal integrity, and exemplify honesty and good moral character. The Texas educator, in exemplifying ethical relations with colleagues, shall extend just and equitable treatment to all members of the profession. The Texas educator, in accepting a position of public trust, shall measure success by the progress of each student toward realization of his or her potential as an effective citizen. The Texas educator, in fulfilling responsibilities in the community, shall cooperate with parents and others to improve the public schools of the community. This chapter shall apply to educators and candidates for certification.


**To complete Certification/Licensing Requirements in Texas related to public education and other professional settings, you will be required to:**

1. Candidates must undergo a criminal history background check prior to clinical teaching and prior to employment as an educator. The public-school campuses are responsible for completing the criminal background check. A person who is enrolled or planning to enroll in a State Board for Educator Certification-approved educator preparation program or planning to take a certification examination may request a preliminary criminal history evaluation letter regarding the person’s potential ineligibility for certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

A Preliminary Criminal History Evaluation is a non-mandatory, non-binding evaluation of an individual’s self-reported criminal history. In addition, the agency obtains your name-based Texas criminal history information. The service is provided to the requestor for a non-refundable fee. The requestor will receive an evaluation letter by email from agency staff advising of potential ineligibility for educator certification.

You are eligible to request a Preliminary Criminal History Evaluation if:
- You enrolled or planning to enroll in an educator preparation program or
- You are planning to take a certification exam for initial educator certification, and
- You have reason to believe that you may be ineligible for educator certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

You are not eligible for a preliminary evaluation of your criminal history if you do not have a conviction or deferred adjudication for a felony or misdemeanor offense.

In addition, you must complete the fingerprinting process when you apply for certification. Participation in the evaluation does not preclude you from submitting to a national criminal history review at the time you apply for your educator certification. Your criminal history will be reviewed, and you may be subject to an investigation based on that criminal history, including any information you failed to submit for evaluation.
Additional information can be found at: https://tea.texas.gov/Texas_Educators/Investigations/Preliminary_Criminal_History_Evaluation-FAQs/.

2. Provide one of the following primary ID documents: passport, driver’s license, state or providence ID cards, a national ID card, or military ID card to take the TExES exams (additional information available at www.texas.ets.org/registrationBulletin/ <http://www.texas.ets.org/registrationBulletin/>). YOU must provide legal documentation to be allowed to take these mandated examinations that are related to certification/licensing requirements in Texas. If you do not have legal documentation, you may want to reconsider your major while at SFASU.

3. Successfully complete state mandated a fingerprint background check. If you have a history of criminal activity, you may want to reconsider your major while at SFASU.

For further information concerning this matter, contact Katie Snyder Martin at 936-468-1740 or snyderke1@sfasu.edu.

IX. Other Relevant Course Information:

Repeating this Course Policy:
If you are repeating ELE 303, then ALL of your work must be original to the repeated course. That means work from a previous semester of ELE 303 may not be resubmitted in the repeated course. Work of any kind submitted from a prior semester will receive a score of “0” with no redo available.

Web-based Course Professionalism
Candidates are expected to be professional at all times. Behaving unprofessionally can adversely affect the candidate’s grade. Candidates are subject to loss of points and/or a course letter grade for behavior unbecoming a professional teacher candidate as determined by instructor discretion. Each teacher candidate exhibits professionalism by:

- attending/participating in all class meetings in accordance with the policies of the university; http://www.sfasu.edu/policies/class_attendance_excused_abs.asp
- becoming familiar with the SFA Policies and Procedures Manual regarding cheating and plagiarism; http://www.sfasu.edu/policies/academic_integrity.asp
- contacting the professor prior to missing a class assignment;
- reading course outline/syllabus and following directions for assignments;
- reading each assigned reading by the stated due date;
- completing ALL ASSIGNMENTS/QUIZZES independently unless otherwise stated by the instructor;
- completing ALL ASSIGNMENTS/QUIZZES on or before the due date;
- submitting ALL WORK in order to complete this course;
- being present and attentive during the SFA campus visit;
- being prepared for quizzes and exams;
- participating intelligently in all class discussions;
- completing the end-of-course online evaluation;
- being professional in demeanor, attitude; and
- maintaining confidentiality at all times.

Professionalism is also considered when teacher candidates take time to help fellow peers who have difficulty reading/finding specifics in the course. Teacher candidates who help fellow peers remain positive and promote change for efficiency in teaching will also be considered to promote professionalism. Being negative is not considered professional.

Nondiscrimination
“No person shall, on the basis of race, color, religion sex, age, national origin, handicap, or veteran status, be subjected to discrimination or be excluded from participation in or be denied the benefits of employment or any educational program or activity operated by Stephen F. Austin State University.” (Reference: SFASU General Bulletin 2004-2005) (see Discrimination Complaints/Sexual Harassment E-46: http://www.sfasu.edu/humanservices/images/discrimination-complaints-sexual-harassment.pdf.