Sam Houston™ STATE UNIVERSITY

CIEE 3334 - Mathematics Instruction in the Elementary Grades
Spring 2018
[This course is required for Interdisciplinary Studies and EC-6 teacher certification]

College of Education, Department of Curriculum & Instruction

Instructor: Dr. Julie Herron
Garrett TEC 245
P.O. Box 2119 SHSU Huntsville, TX 77341
(O) 936-294-1130
Email: jkh037@shsu.edu

Office hours: Monday, Tuesday, Huntsvile , 12-2
Wednesday, TWC, 12-2
or by appt.

Course Format:

This course will be taught using multiple approaches (e.g., project-based learning) in which teacher candidates use critical thinking to formulate solutions to real classroom-related challenges in collaboration with peers. Weekly meetings in this course will consist of modeling the most effective and research-based practices in teaching mathematics that foster and support candidates' active participation and reflections. Learner-centered pedagogy, cooperative learning, group projects, use of literature/writing, integrated curriculum, and instructional technology will be emphasized. Candidates will participate in hands-on activities associated with planning, teaching, and assessing mathematics learning *for all learners* using the Texas state curriculum. Teacher reflection, peer evaluation, and self-evaluation will be required in all phases of the course. Field experience (120 hours at least) in a public school is required.

**Field Experience* is a mandatory component of the method courses. It takes place in established public schools with strong mentors and diverse students. During field experience days (at least 120 hours), candidates will have a variety of assignments that are directly related to this course and allow candidates to see connections among pedagogy, practice, and mathematics.

Day/Time and Location the class meets:

Section 03 – Wed. 9:00-11:50, TWC 251
Section 04 –Mon. 9:00-11:50, TEC 340
Section 05- Tues. 9:00-11:50, TEC 340

Course Description:

This course emphasizes the teaching of meaningful mathematics to children in grades K thru 6. Teacher candidates develop lesson plans of acceptable quality, produce practical teaching aids, and design integrated instructional units appropriate to a specific grade level. Experience is provided in the selection and evaluation of teaching methods, unit and lesson planning, using curriculum and audio-visual materials, technology, and the preparation of instructional materials

appropriate for mathematics content and skills at different elementary and middle school grade levels. Teacher candidates observe and teach mathematics lessons in an elementary (K-6) classroom during their field experience.

College of Education Information

Accreditation

The programs within the SHSU College of Education have the distinction of receiving accreditation and national recognition from multiple accrediting bodies. All educator certification programs, including teaching and professional certifications, have received ongoing accreditation from the Texas Education Agency (TEA). Additionally, the educator preparation program has been accredited by the Council for the Accreditation of Educator Preparation (CAEP-formerly NCATE) since 1954. Many of the educator preparation concentration areas have also chosen to pursue national recognition from their respective Specialized Professional Associations (SPA), signifying the program is among the best in the nation. The programs within the Department of Counselor Education have also received accreditation from the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

Course and Program Evaluation

Near the end of the semester, students are asked to take part in the University's adopted course evaluation system, IDEA. The assessments are completed online and instructions are emailed to each student. Students' assessments of courses are taken are systematically reviewed by the Dean, Associate Deans, Department Chairs, and individual faculty members. Only after the semester has completed are faculty members allowed to view aggregated results of non-personally-identifiable student responses.

The College of Education conducts ongoing research regarding the effectiveness of the programs. Students receive one survey in the final semester prior to graduation regarding the operations of the unit during their time here. A second survey occurs within one year following completion of a program, and is sent to students and their employers. This survey requests information related to students' quality of preparation while at SHSU. Students' responses to these surveys are critical to maintaining SHSU's programs' excellence.

Course/Instructor Requirements

Field Experience provides opportunities for the teacher candidate to achieve the following:

- Begin the transition from a college student to a teacher;
- Familiarize him/herself with the culture of the mathematics classroom in elementary schools;
- Observe, reflect, and put into practice the concepts and skills learned in the course;
- Interact with learners, observe how students gain understanding of mathematics concepts and use of multiple approaches to facilitate learning;
- Observe, experience, and understand the complexity of teacher roles and responsibilities on a daily basis; and
- Develop, apply, and model good dispositions.

Course Requirements and Expectations:

- Each major assignment is treated as a mini Project Based Learning (PBL) to engage the teacher candidates in processes that nurture and support critical thinking;
- Check Blackboard regularly for assignments, announcements, grades, & uploaded files;
- Communicate with your course instructor for any concerns that could affect your learning, attendance, and participation in class;
- Observe regular attendance and prepare to actively participate in class and in the field;
- Engage in team collaboration and active listening and participation;
- Provide/Upload needed assessments (1 math lesson plan, Dispositions (DDPs)) in TK20;
- Engage in thoughtful reflections on teaching practices and learning opportunities; and
- Relate or make cognitive connections between and among readings, discussions, activities, assignments and the NCATE/CAEP, NCTM, DDPs and PPR standards and competencies.

Textbook: ***Helping Children Learn Mathematics,*** Reyes, Lindquist, Lambdin, & Smith, *** You can get the 10th or the 11th ed. Either one is suitable for this course. I will have a few copies on course reserves in the library.

Course Objectives: A matrix that aligns course objectives, activities, assessments, and standards can be viewed on the course page on blackboard

IDEA Objectives: This course will also focus on the following general objectives which will be assessed in the IDEA course evaluation system at the end of the semester:

Essential:

Develop specific skills, competencies, and points of view needed by professionals in the field most closely related to this course (teaching/learning mathematics).

Important:

1. Learn to apply course materials to improve thinking, problems solving, and decisions.
2. Acquire skills in working with others as a team member.

Course Outline

Assignments

Readings/Participation: This course is an activity-based experience. The content of this course will be delivered using a variety of instructional models, which require interaction of students. Verbal participation in the class is expected. You are responsible for reading the assigned chapters and being able to complete assignments related to the readings, therefore each chapter *should be read prior* to each class session.

Written Work: All written work is expected to reflect your utmost professionalism, which includes correct spelling, grammar-usage, and punctuation. While this is a math methods class, evaluation will also include the quality of your submitted written work. Penalties may be assessed for incorrect spelling and/or grammar issues.

Please understand that completion of the assignments (you worked hard on) is necessary but not always a sufficient condition for earning an "A" grade. What counts throughout is the quality and following directions. Grades for individual assignments will be assigned based on a point system with each assignment worth an allotted number of points.

Assignment description: Detailed descriptions and scoring rubrics for every assignment in this course can be found on blackboard.

Late submission of major assignments: In the event that you may not be ready to turn in assignment/s on due dates, late assignments will be accepted only on acceptable circumstances (e.g., death or illness in the family). If an assignment must be turned in late, 10 points **per day** will be deducted from the total points for that assignment.

Grades: A total of 652 points maybe earned in this course.
Grade Distribution: A= 652-586 points B = 585-521points C = 520-456 points
(NOTE: You need a final grade of C or better to qualify for student teaching)
Course Assignments

- **Math Interview = 40 points**
- **Video/Online Quizzes = 62 points (one 12 point quiz; five 10 point quizzes)**
- **Mathematics Homework = 60 points**
- **Lesson plans = 75 points**
  - **Lesson plan 1 (Children's Literature)= 25**
  - **TK20 Lesson plan = 50**
- **Mathematics Teaching Reflection =25**
- **Attendance/active participation in class =90points**

Shared Assignments

- **Professor Dipositions= 150 points**
- **Field Work= 150 points**

Schedule:
See Course Overview and Readings on Blackboard. This is the schedule, however, in teaching we know that sometimes things come up and changes need to be made as the semester progresses. So… be flexible.

Student Guidelines

University Policies

- SHSU Academic Policy Manual-Students
  - Procedures in Cases of Academic Dishonesty #810213
  - Disabled Student Policy #811006
  - Student Absences on Religious Holy Days #861001
  - Academic Grievance Procedures for Students #900823
- SHSU Academic Policy Manual-Curriculum and Instruction
  - Use of Telephones and Text Messagers in Academic Classrooms and Facilities #100728

  - Technology during instruction: students will be allowed to use their cellphones, and other technology only when needed during instruction or when small groups are working.
  - Technology during exams: NA
  - Technology in emergencies: Students may check their cellphones on when there is family-related emergency OR you or your peer has an emergency situation during class.
- Visitors in the Classroom- Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance.

Students with Diablilities

Any student with a disability that affects his/her academic performance should contact the Office of Services for Students with Disabilities in the SHSU Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786) to request accommodations.

Attendance

This class meets once a week only (2 hours and 50 min). Hence, attendance is strictly monitored. A student is allowed ***only*** 1 absence with reasonable excuse. The second absence will be dealt by having a student-instructor conference or a meeting with the department's Concerns Committee. The second absence will have implications for your grade.

Tardy Policy: Student are allowed 1 minimal (less than 10 mins) tardy for the semester. Multiple tardies or an excessive tardy will have implications for your grade.

Course Expectations

The student (teacher candidate) must model professionalism at all times, submit high-quality work on time, actively engage in class activities, and participate/collaborate well with peers, instructors, and mentors.

The student is responsible for reading, understanding, and agreeing to every expectation stated in this syllabus. This serves as a binding contract between the student and the instructor.