

**Auburn University  
Course Syllabus**

1. **Course Number:** CTSE 4923/7926  
**Course Title:** Internship in Secondary Mathematics  
**Credit Hours:** 10 Semester Hours  
**Prerequisites:** Admission to Internship  
**Corequisites:** CTSE 4203 (2 Semester Hours)
2. **Date Syllabus Prepared:** January 3, 2007, completed by Dr. Marilyn Strutchens; updated December 19, 2013.
3. **Texts or Major Resources:** Syllabus and College of Education Internship Handbook; Students will use resources from previous courses.
4. **Course Description:** This course combines learning with hands-on experiences in a public school setting. Interns will observe and talk with teachers and other school professionals to gain insight into the workings of today's public schools. Interns will develop and implement lesson plans with the aid of an experienced teacher. Interns will learn how to plan and conduct laboratory and hands-on experiences to coincide with lessons taught. They will videotape various lessons and will use these to reflect on their own teaching. Further opportunities for reflection will be provided by observations by their Auburn University Supervisor and interactions with the cooperating teacher in their school.

**5. Course Objectives:**

Course objectives include a subset of key indicators from the Alabama Quality Teaching Standards (AQTS) and program-specific indicators. AQTS indicators assigned to CTSE 4923/7926 Internship in Secondary Mathematic Education are highlighted on the performance assessment template included in the attachments. Program-specific indicators are noted below.

The following objectives coincide with the goals mentioned above:

1. To use fundamental mathematical operations, algorithms, and measurements essential to teaching the full range of secondary mathematics; **290-3-3-.13: 1b.1**
2. To use language and symbols of mathematics accurately in communications; **290-3-3-.13: 1b.3**
3. To use a variety of manipulative and visual materials to help students explore and develop mathematical concepts; **290-3-3-.13: 1b.4**
4. To conduct and lead students in inquiry math activities; **290-3-3-.13: 1b.5**
5. To use technology and other resources to enhance the teaching of mathematics and to promote students' understanding of mathematical concepts; **290-3-3-.13: 1b.10 (T)**

**6. Course Content and Schedule:**

**Tentative Schedule for Intern Meetings**

Date	Event
<b>Friday, January 3, 2014</b>	CSM Intern Orientation Meeting; 3:00 p.m. – 5:30 p.m., 2456, Haley Center
<b>Wednesday, January 8, 2014</b>	AU Classes begin.
<b>Saturday, January 11, 2014</b>	College Orientation Meeting; 9:00 a.m. – 11:00 a.m., 3195 Haley Ctr.
<b>Monday, January 20, 2014</b>	<b>Martin Luther King, Jr. Day</b> ( <i>Interns observe holidays of school system in which they are interning</i> )
<b>By January 22, 2014</b>	Meeting with university supervisor and cooperating teacher to discuss scheduling observations and other concerns.
<b>Week of January 27, 2014</b>	Observation of interns
<b>Tuesday, January 28, 2014</b>	PWS Prep; 4:30 – 5:30 p.m.
<b>Monday, February 3, 2014</b>	CSM University Supervisors meet to discuss interns' progress; 10:00 -11:00
<b>Week of February 17, 2014</b>	Observation of interns; Midterm Portfolio Entries are due.
<b>Monday, February 24, 2014</b>	CSM University Supervisors meet to discuss interns' progress; 10:00-11:00
<b>Wednesday, February 26, 2014</b>	Mid-Semester - Debriefing with all interns, 12:30 – 3:30 p.m.

<b>Thursday, February 27, 2014</b>	Mid-Semester
<b>Tuesday, March 4, 2014</b>	<b>Education Interview Day: 8:00 a.m. – 3:00 p.m., Auburn University Hotel and Dixon Conference Center</b>
<b>Monday – Friday, March 10 – 14, 2014</b>	<b>Spring Break (<i>Interns observe holidays of school system in which they are interning</i>)</b>
<b>March 17 - 28, 2014</b>	PWS (Observations)
<b>March 31, 2014</b>	CSM University Supervisors meet to discuss interns' progress; 10:00 -11:00
<b>Week of March 31, 2014</b>	Observation of interns (Supervisors will work this out with Interns and Cooperating Teachers.)
<b>April 14, 2014</b>	CSM University Supervisors meet to discuss interns' progress; 10:00 -11:00
<b>Week of April 21, 2014</b>	Final Observations of interns; Debriefing with interns and cooperating teachers; and Portfolios are due.
<b>Friday, April 25, 2014</b>	Classes End
<b>Monday, April 28, 2014</b>	Evaluation Meeting; Evaluation Meeting; 3:00 p.m. – 4:30 p.m., 2370 Haley Ctr
<b>Monday, April 28, 2014</b>	Intern Debriefing 4:30 – 6:00 p.m.

Interns should prepare a lesson plan (see Appendix A for a lesson plan format and sample lesson) for each lesson or activity that they conduct. Lesson plans should be thorough and typed. A copy of each lesson plan should be provided to their Cooperating Teacher five days before the lesson is taught. One week prior to an announced observation, interns should send their University Supervisor a copy of the lesson plan to be taught, including handouts. At the beginning of an observation, interns should present the University Supervisor with a hard copy of the lesson plan to be taught, copies of all lesson plans that have been taught previously, and at least four days of future lesson plans for each course the intern is presently teaching. The interns should take good notes during the debriefing with their supervisors after an observation, then send a reflection on the debriefing within two days that details what the interns will do differently in future lessons.

A daily journal containing written observations of teachers, other school professionals, and students, as well as daily reflections on practice, should be kept following the recommendations given in Appendix B. This should be kept in a composition book and should be available for review upon request.

Interns will be responsible for creating an exit portfolio (using an accordion folder) for the exit exam of their internship. Some components of the portfolio (to be included in the folder) will be due at the mid-semester debriefing. Portfolio contents and due dates are described on the portfolio cover sheet (see Appendix C). College wide portfolio components are explained in the Internship Handbook.

<b>Summaries of Assignments</b>	<b>Due</b>
<b>Daily Journal:</b> Keep a daily journal of your observations and experiences. See Appendix B for details.	On-going Include in portfolio (checked at midterm)
<b>Intern Information Sheet:</b> Turn in the form in Appendix D.	Week 1
<b>Résumé:</b> Turn in to your University Supervisor.	Week 3: January 31, 2014
<b>Conduct an inquiry or activity lesson</b> that is integrated with the class activities for the week. Discuss in your Daily Journal.	Week 5
<b>Videotaped Lesson #1:</b> Record and watch the first videotape of your class and write a two-page critique of the lesson. Include at least three positive features of your teaching, and at least three things that you wish to improve. You may want to consider the questions included in the <i>Reflective Paper...</i> handout (see Appendix E).	Week 5 You may use the tape and critique as an optional component of your portfolio.
<b>Goals for Improvement:</b> Set approximately five specific goals for improvement of your teaching during the internship based on discussions with your cooperating teacher, the first observation by the university supervisor, and your reflections on the first video of your teaching. These goals will help you focus on areas needing improvement, practice, or experience. Discuss your proposed goals and your critique of your Video Lesson #1 with your cooperating teacher and e-mail them to your university supervisor for reaction.	Week 6 Include in portfolio (checked at midterm)
<b>Technology-enhanced Lesson.</b> Plan and execute a lesson using technology, making sure that its objectives are in alignment with what you are teaching in that class. Write a reflection on the execution of the lesson.	Week 6 or later Include in portfolio

<b>Teacher Evaluation:</b> Prepare and use a <i>Teacher Evaluation</i> instrument handout (see sample in Appendix F) in one of the classes you have taught the longest. Distribute the instrument to students and collect them. Prepare a summary tabulation chart of the results with a written summary of implications for your teaching. You will do this exercise again with the <u>same class</u> later in the semester.	Week 7 Include in portfolio (checked at midterm)
<b>Professional Work Sample (PWS):</b> See <b>College Guidelines</b>	Week 7 Include draft of PWS lesson plan in midterm portfolio
<b>Midterm check of Portfolio</b>	Week 8
<b>Special Needs Student.</b> Locate a student who needs special academic help (at either end of the bell curve) and provide some special intervention (in consultation with your teacher and the special education teacher) to help with the special need. Initially document the need or problem, what you have done/are doing ongoing, and the outcome(s) as an <i>ongoing part of your daily entry in your journal beginning this week.</i>	Week 9 or before Place a summary of what occurred with your intervention and the special needs student in the portfolio
<b>Videotaped Lesson #2:</b> Record and watch the second videotape of your class and write a two-page critique of the lesson. Include at least three positive features of your teaching, and at least three things that you wish to improve. You may want to consider the questions included in the <i>Reflective Paper...</i> handout (see Appendix E). Are you improving in your areas of weakness from the first and second videotapes?	Week 10 You may use the tape and critique as an optional component of your portfolio.
<b>Follow-up Teacher Evaluation:</b> Again use the <i>Teacher Evaluation</i> instrument in the same class as before. Distribute the instrument to your students and collect them. Prepare a chart of the tabulated results and a written summary of findings for this second time. Add an additional summary about the changes noted from the first evaluation. How has your teaching improved in the eyes of your students?	Week 13 Include in portfolio
<b>Progress in Reaching Goals:</b> Go back to your Goals for Improvement and prepare a progress report. Include growth seen in videos and feedback from University supervisor and cooperating teacher.	Week 14 Include in portfolio
<b>Portfolio:</b> Turn in your final portfolio and all required paperwork.	Week 15
<b>Thank You Letters:</b> Send thank you letters to your cooperating teacher and host school (see sample in Appendix G).	Week 15

**Timeline of Experiences**

<b>Student Timeline</b>	<b>Cooperating Teacher Timeline</b>
<p><b>Weeks 1 and 2:</b> Report to your school at the regular faculty check-in time and stay until the regular faculty check-out time. Attend all departmental and school meetings when they do not conflict with CTSE 4200. Activities should include:</p> <ol style="list-style-type: none"> <li>1. Observe cooperating teacher’s classes and classes of other members of the faculty</li> <li>2. Help with grading; monitor small group and individual work; and assist in other classroom activities (other than full-class teaching)</li> <li>3. Get to know the students in the classes you will be teaching; memorize students’ names</li> <li>4. Raise any questions you have concerning your teaching assignment with your university supervisor prior to the first meeting of your university supervisor, your cooperating teacher, and you. E-mail or call your university supervisor with any questions or concerns as they come up.</li> </ol> <p>Goals for this period include the following. Document attainment of these goals in your daily journal.</p> <ol style="list-style-type: none"> <li>1. Get to know your cooperating teacher’s:</li> </ol>	<p>Help your intern become familiar with your school.</p> <p>Your intern should not begin teaching lessons until Week 3, but they should become very involved with your classes, including: Help with grading; monitor small group and individual work; and assist in other classroom activities (other than full-class teaching)</p> <p>You should also begin to develop a plan for the semester in consultation with your intern, including:</p> <ul style="list-style-type: none"> <li>• Which classes the intern will pick up and when they will be picked up</li> <li>• What units the intern will be teaching for each class</li> <li>• What the intern is expected to do (such as grading, calling parents, etc.)</li> <li>• Involvement in extra-curricular activities and other out-of-class duties</li> <li>• An “exit strategy” for returning classes to your control.</li> </ul>

<ul style="list-style-type: none"> <li>• Expectations for you</li> <li>• Expectations of the students</li> <li>• Guidelines for classroom behavior</li> <li>• Grading system, attendance policies, etc.</li> <li>• Philosophy regarding pedagogy and teaching methods</li> </ul> <p>2. Explore available resources at the school:</p> <ul style="list-style-type: none"> <li>• Technology, such as graphing calculators, computer labs, software available</li> <li>• Physical materials</li> <li>• Resource books</li> <li>• Department chair and other members of the department</li> </ul> <p>3. Get to know the school, its personnel, and its policies (professionalism):</p> <ul style="list-style-type: none"> <li>• Meet relevant school personnel (principal, assistant principal, secretary, department head)</li> <li>• School dress code</li> <li>• Policy for calling in sick</li> <li>• Familiarity with school policies and procedures (e.g., how to report an accident)</li> <li>• Daily schedule and calendar for the semester</li> <li>• Department chair and other members of the department</li> </ul> <p>4. Discuss the classes you will be covering with your cooperating teacher:</p> <ul style="list-style-type: none"> <li>• When you pick up each class?</li> <li>• What units you will be teaching for each?</li> <li>• What you are expected to do (such as grading, calling parents, etc.)?</li> <li>• What extracurricular activities and other out-of-class duties will you have?</li> <li>• What teacher manuals, resource books, and other materials are available?</li> </ul>	
<p><b>Week 3</b>                  Begin to co-teach or shadow teach with your teacher during at least two of the same subject classes (one if block) from his/her lesson plans – observe/assist one class, then take the lead in teaching the next class. Or, take the lead in teaching a segment of your teacher’s lesson in any class.</p> <p>Continue to plan and meet with your teacher during non-teaching times to make final arrangements for what, when, and how long you will begin teaching on your own – continue to find activities and items of student interest for the content you will be teaching.</p>	<p>You should maintain responsibility for planning the classes the student is co-teaching.</p>
<p><b>Week 4</b>                  Begin teaching at least two classes (one if block) of the same preparation on your own and from your own lesson plans. Meet daily with your teacher to discuss your first classes taught.</p> <p>Continue to co-teach or assist your teacher for the remainder of the classes that you are not teaching. Observe how your teacher executes a lesson (your plans or theirs) in the areas where you had difficulty.</p>	<p>Closely supervise the intern’s teaching as they pick up their first class.</p>
<p><b>Week 5</b></p>	

<p>Begin teaching at least three classes (two if block) of the same or similar preparation on your own and from your own lesson plans.</p>	<p>Continue to closely supervise the intern, but occasionally leave the intern alone with the first class that was picked up, if you feel they are ready.</p> <p>Do a formal observation of one class period (or a segment, if block) of the first class that was picked up and debrief with the intern afterwards, to serve as a baseline. This could be the lesson that they videotape.</p>
<p><b>Week 6</b> Continue teaching at least three classes (two if block).</p>	<p>Continue to leave the intern alone for some class periods. They should be picking up primary responsibility for the classes they are teaching.</p> <p>Do a formal observation of one of the other classes they have picked up.</p>
<p><b>Week 7</b> Begin teaching a full load of five classes (three if block) <u>for not less than four weeks</u> (20 days).</p>	<p>Minimize your presence in the first class that the student picked up, other than to monitor their progress, to give them the full feeling of being in control of a class.</p>
<p><b>Week 8</b> Continue teaching five (three if block) classes.  Turn in your portfolio for the midterm check.</p>	<p>Your presence should now be minimal in the first two classes they picked up. Do a structured observation of the first class the intern picked up, in order to note their progress thus far. Prepare mid-term evaluation and discuss your ratings with student.</p>
<p><b>Week 9</b> Continue teaching five classes (three if block).</p>	<p>Continue to work at minimizing your presence in all the classes that they are teaching, other than to monitor their progress. Do a structured observation of the third class they have picked up.</p>
<p><b>Week 10</b> Continue teaching five classes (three if block).</p>	<p>The intern is now in full control of all the classes. Continue to monitor their progress. Do a structured observation of the second class they picked up.</p>
<p><b>Week 11</b> Continue teaching five classes (three if block) until the requirement of 20 days is met.</p>	
<p><b>Week 12</b> Begin returning classes to your cooperating teacher. Begin co-teaching again in returned classes with your cooperating teacher using his/her lesson plans.</p>	<p>Do a final observation of the first class before it is returned to you.</p>
<p><b>Week 13</b> Continue the process of returning classes to your cooperating teacher. Continue co-teaching in the classes you return using his/her lesson plans</p>	<p>Prepare a draft of your final intern evaluation and discuss with the intern.</p>
<p><b>Week 14</b> Continue co-teaching with your cooperating teacher in some of the classes.</p>	<p>Final intern evaluation is due.</p>
<p><b>Week 15</b> (last week in the school) Continue to assist your cooperating teacher and observe other teachers in the building. Reflect on observations in your journal.</p>	

<p>Ensure that all necessary forms are completed and signed by both you and your cooperating teacher, including: Verification of 70 days; Final Evaluation, Verification of University Supervisor's Visits</p>	
<p><b>Post-Internship Week</b>                  Additional CTSE 4200 class meetings at Auburn University.                  Final completion and submission of the exit portfolio, including all required paperwork.</p> <ul style="list-style-type: none"> <li>• Final intern checkout meeting (<b>required</b>)</li> </ul>	

**7. Course Requirements/Evaluation:**

A Satisfactory (S) or Unsatisfactory (U) will be assigned at the end of the semester. Grades will be assigned based on the following:

- Internship Verification Form
- Portfolio Review Form/Rubric
- Classroom Observation Instrument
- The Professional Work Sample (PWS)
- EDUCATEAlabama Evaluation Form (administered at midterm and at the end of the semester)
- Professional Disposition Checklist

We will discuss your progress on meeting these criteria at mid-semester.

The Alabama State Board of Education requires all students completing teacher certification programs to be assessed using the Alabama Quality Teaching Standards (AQTs) and program-specific standards. Key internship assessments aligned with the AQTs are (1) the Professional Work Sample, (2) Classroom Observation Form, and (3) Professional Disposition Form, and (4) EDUCATEAlabama Evaluation Form.

The final internship grade (S, U) is determined by the university supervisor and the cooperating teacher based on the key assessments, listed above.

**8. Class Policy Statements:**

Attendance/Absences: Interns are expected to be at their assigned school each day in which that school is in session during their internship. In case of unexpected absence the intern should first notify his/her cooperating teacher and then their Auburn University Supervisor. All interns are required by state law to have **70 full time days** in the school (or 15 full weeks) during their internship semester. Failure to do so could result in the intern not receiving certification at the end of the semester.

Unannounced quizzes: There will be no unannounced quizzes.

Accommodations: Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

Honesty Code: The University Academic Honesty Code and the Student Policy eHandbook ([www.auburn.edu/studentpolicies](http://www.auburn.edu/studentpolicies)) and Regulations pertaining to Cheating will apply to this class.

Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are listed below:

- Engage in responsible and ethical professional practices
- Contribute to collaborative learning communities
- Demonstrate a commitment to diversity
- Model and nurture intellectual vitality

A signed contract will be required detailing aspects of professional conduct.

- **AU eValuate Fall Semester evaluation dates: TBA**

**Appendix A.  
Lesson Plan Format and Sample Lesson**

Title of lesson: This should identify the general content to be covered.

Audience: To whom is the lesson addressed, including course or level.

Content Objectives: Definitions of the mathematical concepts and skills that underlie the lesson that you are teaching, written at a level that will match the students you are teaching.

Behavioral Objectives: The actual behaviors that you hope to observe students doing during the lesson. These should be given in behavioral terms, often stated in the form "The student will..."

Course of Study and TEAM-Math Objectives: List the objectives addressed.

Prerequisites: Assumptions about what mathematics the students should already know in order to effectively engage in this lesson.

Materials: Any special instructional materials needed for the lesson. Attach copies of any worksheets that will be used.

Procedure: What you are actually going to do. This should set forth the over-all flow of activity throughout the lesson. The plan should be detailed enough that a qualified person could successfully carry out the lesson.

Your lesson will likely consist of several phases. For each phase, include:

- *Overview.* A brief description of what will happen in that phase; a title for the section will suffice.
- *Grouping.* How the students will be grouped.
- *Tasks or examples.* Give the exact problems as they will be stated to the students. Do not just state the kinds of problems.
- *Key questions.* Give these questions exactly as you would actually ask them of the students. These should be attached to the flow of activity.
- *Transitions.* Decision points for deciding what should happen next.

You may also want to include some extensions that could be given to advanced students or modifications that you would make for less-able students.

Evaluation: Observations that you will be making throughout the lesson, or additional tasks that the students will complete so that you can evaluate their learning. Include what you are looking for, and what you hope to learn from your observations.

Key References

## Counting Raisins

**Topic:** Introducing Line Plots

**Grade level:** Grades 5-7

**Content Objectives:**

1. Line plots are useful counts of things along a numeric scale.
2. To make a line plot, a number line is drawn and an X is made above the corresponding value on the line for every corresponding data element.

**Behavioral Objectives:**

1. Students will count the number of raisins in a sample of small boxes of raisins (one box for each student), record and organize the results, and describe the shape of the data distribution based on a line plot.
2. Students will understand what a line plot is and how it is useful.

**Prerequisite Skills:** Counting, addition, and estimation

**Materials:**

For each student:

- 1 half-ounce size box of raisins
- 1 sheet of unlined paper for making the line plots

For whole class discussions:

- overhead projector, overhead pen, blank sheet of transparency paper to list the counts, line plot

**Procedure:**

Launch (full group)

1. Ask the following questions:
  - Have you ever heard the word statistics?
  - Can you give me any examples of statistics?
2. Explain what statistics is.
  - Statistics is the study of data.
  - Data are numbers that give us information about something in the real world.
3. Tell the students that you can collect some data right now.
  - Ask the following questions, count the students' responses, and point out that these are data:
    - How many people in this room have a pet?
    - How many people in this room have brown eyes?
    - How many people in this room take a bus to school?
4. Tell the students that people collect data by counting, like we just did, or by measuring or by doing experiments.
  - Ask the following question:
    - Who can think of some data we can collect by measuring?
5. Explain why mathematicians or scientists collect and study data.
  - Mathematicians and scientists collect and study data to look for patterns that can tell them something important. For example, studying data about traffic accidents might provide information about which kinds of cars are the safest or whether seat belts make a difference. (If possible provide an example of the use of statistics in your school or community.)

Introduction of the task (full group)

6. State the following:
  - Just like mathematicians and scientists who use statistics, we can collect data to find out new things about ourselves or other things around us. Today we are going to start by collecting data about something familiar--a box of raisins.
7. Present the problem:
  - Give each student a box of raisins. Ask the students to keep the boxes closed.
  - Ask: Does anybody have an idea about how many raisins there are in a box this size?
  - After students make their guesses, allow them to open their boxes and look at the top layer of raisins.

Ask: What do you think now? Do you want to revise your estimate?

After students respond, ask the following questions:

Why do you think there will be about [50]?

Your idea is very different from Jan's; how are you thinking about your estimate?

Will the number of raisins in each box be the same or different? Why do you think so?

8. Now, let the students open their boxes and count the raisins.
9. Record students' data on the blank transparency or chalkboard in whatever order they report it.
10. Ask: If we wanted to organize these data better so that we could look for patterns, what could we do?

#### Organizing the data (small groups)

11. Tell the small groups to choose one way to organize the data quickly.
  - Emphasize that this is a rough draft sketch; it need not be done meticulously.
  - Each group should write down three important things they can say about their data.
12. Someone tell me in your own words what I want you to do with the data.
  - Tell me how you would organize the data so that someone could quickly look at it and see the average amount of raisins one would find in the boxes that we used. What do I mean by average amount? Can someone tell me how you would organize the data?
13. Students now work in pairs to find a way to organize the data and write down three important things they can say about their data.
14. Circulate among the pairs and ask key questions:
  - How did you decide to organize the data?
  - Tell me what you are doing. Share with me what you are doing.
  - That looks interesting, tell me about it.
  - How is your pair keeping track of your information?
  - Tell me why you are... .

#### Whole group sharing

15. Ask a few students to demonstrate their methods for organizing the data on the board. Make sure that all the different types of representation they have invented are demonstrated.
16. Say: Mathematicians have invented ways of displaying data, too. Here's one way that's easy to use. It's called a line plot.
17. Organize the raisin data on a line plot large enough for everyone to see.
18. Ask questions related to the data:
  - What are some of the things you decided you could say about these data?
  - Where are the bumps, clumps, holes, clusters, and gaps in the data?
  - What else can you say about these data?
  - Does anyone have another way to describe this representation?
  - Suppose someone asked you, "about how many raisins are in a box?" What could you say?
19. If we opened five more boxes of raisins, what is your best guess about how many raisins would be in them, based on the data we already have? Allow students some time to think about this question.
20. At the end of the session allow students to eat the raisins.

**Evaluation:** Observe students' responses. Give students another set of data and ask them to organize it so that it could be analyzed easily.

#### **References:**

- Russell, S. J. & Corwin, R. B. (1989). *Statistics: The shape of data (grades 4-6)*. Used numbers: Real data in the classroom. Palo Alto, CA: Dale Seymour.
- Corwin, R. B., & Friel, S. N. (1989). *Statistics: Prediction and sampling (grades 5-6)*. Used numbers: Real data in the classroom. Palo Alto, CA: Dale Seymour.
- Friel, S. N., Mokros, J. R., & Russell, S. J. (1989). *Statistics: Middles, means, and in-betweens (grades 5-6)*. Used numbers: Real data in the classroom. Palo Alto, CA: Dale Seymour.

## Appendix B. Daily Journal Reflections

You will use your journal to complete specific assignments for your internship including:

- a) written observations, interview notes, and reflections of two other mathematics teachers
- b) descriptions of the specific services school support personnel provide classroom teachers – for example, media specialist, technology specialist, special education teacher, guidance counselors, etc.
- c) ongoing documentation on your chosen special needs student: the problem, your ongoing (daily) intervention, and outcomes. (see special needs student assignment in syllabus)

In addition to these assignments, each evening of your internship you will write a reflective entry about your teaching experiences in school. These entries should be from **1-2 pages in length** and be informal in style. Entries should **include the day and date** like a diary and be more personal, thoughtful, and critical of your teaching and school-related experiences. Some possible areas for writing include critical observation of teaching, students, and schooling; dilemmas with no easy solution; personal difficulties and struggles; your developing and evolving philosophy of teaching and learning; inquiry in mathematics education; your growth as a new teacher; and potential solutions to problems. Some possible questions or issues that may arise during your internship include:

1. Where am I making novice mistakes and what am I learning from these mistakes?
2. What skills or strategies about teaching mathematics or managing students have I learned today?
3. What great resource or experience have I encountered that will be extremely useful to me (and others) as a beginning mathematics teacher?
4. What am I doing to better manage my workload and time, both in the classroom and at home?
5. What weaknesses are appearing in my beginning teaching? What am I doing to overcome these weaknesses? Who am I consulting for help?
6. What about schools (or students) seem different from what I expected or remember from my past? How do my ideals conflict with my current situation? How do I cope?
7. What about this school or teacher's classroom seems congruent with my own emerging philosophy of teaching mathematics? What is not? Am I likely to believe that "all schools" are like this one? Why or why not?
8. Do I feel trapped in the routine of my classroom? Am I seeking assistance from other teachers in planning, teaching, and assessing my students?
9. What do I think about my teacher's or school's assessment and grading practices? What types of student work is assessed and how often? What are students "learning?" How does this compare with "best practices" according to NCTM's *Standards*, state and local standards for mathematics, assessment research, and other?
10. Where is my initial attitude and approach to teaching beginning to change? Is this change best for students and their learning, as well as their motivation and interest in learning?
11. Why do many students in my classroom not want to participate or succeed? Am I teaching to diversity in learning styles, intelligences, and cultures? What about the nature of schooling is contributing to this aspect – instruction and discipline methods? Is what I am teaching important, relevant, and applicable to their lives?
12. What impact is block, standardized testing, or my school's (or teacher's) philosophy having on my ability to implement the kind of teaching that I want to do? What will I do in my classroom if under similar constraints?

In each journal entry you should also propose possible solutions to existing conundrums or problems. You should begin implementing "plans of action" in your daily practice as well as discuss the results of action(s) taken. Reflective journaling combined with action research can lead to improvement in practice.

**Appendix C.  
Portfolio Review Form**

Student's Name \_\_\_\_\_ Date \_\_\_\_\_

Student's Major \_\_\_\_\_ Reviewer \_\_\_\_\_

Please evaluate each reflection statement by circling the appropriate word.

**College-Wide Components: Professional Work Sample Due Date**

See Internship Portfolio Assessment Form: Include draft at midterm.

**Program-Specific Components:**

Professional Résumé	Poor	Marginal	Competent	Exemplary	<i>January 31, 2014</i>
Specific Goals for Improvement	Poor	Marginal	Competent	Exemplary	<i>mid-term</i>
Reflection on Student Evaluations	Poor	Marginal	Competent	Exemplary	<i>mid-term</i>
Reflection on Experience with Special Needs Student	Poor	Marginal	Competent	Exemplary	<i>mid-term</i>
Technology-Enhanced Lesson and Reflection (Include Lesson plan)	Poor	Marginal	Competent	Exemplary	<i>end-term</i>
Reflection on Student Evaluations	Poor	Marginal	Competent	Exemplary	<i>end-term</i>
Reflection on Progress in Achieving Specific Goals for Improvement	Poor	Marginal	Competent	Exemplary	<i>end-term</i>
Daily Reflective Journal	Poor	Marginal	Competent	Exemplary	<i>end-term</i>

**Optional Component(s):** (such as letters of recommendation, samples of student work, sample communications with students/parents, photographs of students in action, samples of your original work)

_____	Poor	Marginal	Competent	Exemplary
_____	Poor	Marginal	Competent	Exemplary
_____	Poor	Marginal	Competent	Exemplary

**Forms to be included:** (Remember to check for appropriate signatures)

- \_\_\_\_\_ Internship Verification Form
- \_\_\_\_\_ Portfolio Review Form/Rubric
- \_\_\_\_\_ Classroom Observation Instrument
- \_\_\_\_\_ The Professional Work Sample (PWS)
- \_\_\_\_\_ Auburn University / EDUCATE Alabama Collaborative: Internship
- \_\_\_\_\_ Professional Dispositions Checklist

**Recommendation:**

- \_\_\_\_\_ Portfolio is acceptable without changes
- \_\_\_\_\_ Portfolio is acceptable with minor changes
- \_\_\_\_\_ Portfolio must be revised significantly

**Please make written comments on the reverse side.**

**Appendix D.  
Intern Information Sheet**

Name:

Mailing address:

Home phone:

Preferred e-mail address:

School name:

School principal:

School address:

School phone:

Cooperating teacher:

Teacher's e-mail:

Teacher's school phone number or extension (if different):

If you have a second cooperating teacher, include information here:

Schedule of classes at host school:

Period	Times (CST)	Subject or grade level	Teacher	Room #

Outline of the dates and order of classes that you will begin teaching on your own:

Dates of holidays, teacher workdays, testing days, and other dates when your supervisor should not visit:

On the back of this sheet, draw or write directions to your school, including where to park and location of the office.

**Appendix E.  
Reflective Paper on Videotaped Lesson**

**Procedure:** Watch your videotaped teaching and make notes on each of the following 10 statements. Incorporate your notes and your supervisor's and cooperating teacher's comments into a final reflective paper (2-3 pages) that you submit to your cooperating teacher and your university supervisor. Your reflective paper must be completed soon after your taping (next materials drop off time). Save a copy of your work for your portfolio.

1. Did I adequately get the students' attention when I needed it?
2. Did I check to see that all students were on task? How did I handle those who were not?
3. Did I question all students equally and allow adequate wait time?
4. Was I creating an atmosphere of trust, caring, and mutual respect?
5. Did the students show that they clearly knew my academic and behavioral expectations for the lesson?
6. How did I handle classroom disruptions or behavior problems (*if applicable*)? What could I have done differently?
7. How well did I prepare my students for their lab, project, or activity? What could I have done to better prepare them for it?
8. Where in my lesson did I incorporate a more student-centered teaching strategy over more teacher-centered ones? If not in this lesson, when will I do so in upcoming lessons?  
Some examples of student-centered strategies include cooperative learning, think-pair-share, peer tutoring, partnered lab activities, inquiry activities or projects, student journaling, rotation stations, etc.
9. Where in my lesson did I build on students' prior knowledge, understanding, or ideas AND how did I incorporate this prior knowledge into my lesson?
10. Where in my lesson did I use some form of inquiry or higher order thinking? If not, how might I have used it in my lesson?

**Final Analysis**

What three things did I do well in my videotaped lesson and how can I share my strengths with my fellow interns?

What three things do I most need to work on (goals) before my next videotape and what specifically will I do to better each?

**Appendix F.  
Evaluation Instrument**

Today's Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

This evaluation applies **only to this teacher** and **only to this course**, not to other courses or teachers. Please **do not** put your name on this evaluation.

In each row below is a sentence relating to the teacher you are evaluating, followed by the numbers 1 through 5. Please circle one and only one number for each statement. Choose the number based on the descriptions below:

- 1 = strongly disagree with the statement
- 2 = somewhat disagree with the statement
- 3 = neither agree nor disagree
- 4 = somewhat agree with the statement
- 5 = strongly agree with the statement

	strongly disagree				strongly agree
This teacher grades fairly.	1	2	3	4	5
This teacher is often impatient with students.	1	2	3	4	5
This teacher has very high expectations of me.	1	2	3	4	5
This teacher makes this class interesting.	1	2	3	4	5
This teacher treats all students fairly.	1	2	3	4	5
This teacher gives clear directions for assignments.	1	2	3	4	5
This teacher encourages me to do my best work.	1	2	3	4	5
This teacher spends too much class time doing things that do not help me learn.	1	2	3	4	5
This teacher is nearly always prepared for class.	1	2	3	4	5
This teacher lets me know what I am expected to learn.	1	2	3	4	5
This teacher cares about me.	1	2	3	4	5
This teacher explains ideas clearly.	1	2	3	4	5
This teacher has helped me become more interested in mathematics.	1	2	3	4	5
This teacher has helped me understand mathematics better than I did before this course.	1	2	3	4	5

Compared with all teachers that I have had, this teacher is (check one):

- |  |   |
|--|---|
| <input type="checkbox"/> one of the best | <input type="checkbox"/> below average    |
| <input type="checkbox"/> above average   | <input type="checkbox"/> one of the worst |
| <input type="checkbox"/> average         |   |

**Please write on the back** any suggestions that you have for how the teacher can make this class better.

**Appendix G.**  
**Sample Thank You Letter to Host School**

<<your address>>  
<<your city, state, zip>>  
<<your phone>>  
<<today's date>>

<<teacher's name>>  
<<school address>>  
<<school city, state, zip>>

Dear Ms. <<teacher's last name>>

Thank you very much for providing me with the opportunity this semester to work at <<school name>> as a teaching intern from Auburn University. The experiences I had at your school have helped me get a good start on my career as a mathematics teacher. I especially appreciate the time you spent with me as I began the long process of becoming a professional in this field.

<<Here write a short paragraph describing the unique experiences you will remember that helped you master the basics of teaching. For example, parent conferences, special advice, opportunities you had to work with students, etc.>>

I hope you don't mind serving as a reference in my search for a teaching position in the coming months. I have listed my permanent address and telephone number at the top of this letter so that you can locate me if the need arises.

I hope that you have a relaxing and restful summer, and that the 2013 - 2014 will be another fulfilling year for you and the staff at <<school name>>.

Sincerely,

<<your name>>