

Instructor: **Dr. Art Duval**

office: **Bell Hall 303**

phone: **747-6846**/office (24hrs./day; if I'm not in, please leave a message)
545-1788/home (9am–9pm only, please)

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<http://www.math.utep.edu/Faculty/duval/home.html>

Office hours: **Mon, Wed, 1:00–2:00; Tue, Thu, 10:00–11:00**. Please feel free to come by my office any time during scheduled office hours. You are welcome to come at other times, but in that case you might want to make an appointment, just to make sure that I will be there then. You can make an appointment simply by talking to me before or after class, by calling me at my office or at home, or by sending e-mail.

You may also ask any questions directly via phone or e-mail. If I'm not in when you call, please leave a message on the voice-mail or answering machine with your name, number, and a good time for me to call you back. I will try to repond to your phone or e-mail message as soon as possible.

Website: <http://www.math.utep.edu/Faculty/duval/class/3308/044/home.html>

Here you will find this syllabus with relevant links. Other resources may become available.

Course Objectives: The purpose of this course is for you to become involved with a wide variety of situations and contexts which give rise to mathematical concepts essential for teaching grades 4–8. Specific topics include the (sometimes surprisingly deep) mathematics underlying functions, factoring (number theory), fractions, ratios, congruence, similarity, and geometric transformations. A common theme will be finding relationships between algebra and geometry.

Another goal is for you to become adept at, and comfortable with, analyzing and solving rich mathematical problems that you do not necessarily immediately know how to solve.

Textbook: **A Problem Solving Approach to Mathematics for Elementary School Teachers, 8th ed., Billstein, Libeskind, Lott.** We will be discussing the material of Sections 2.1 and 2.5, and Chs. 4, 5, 6, 10, 12.

GRADES:

Homework (20%) Individual homework will be assigned regularly, and due approximately weekly. You are allowed to work together on homework (in fact, I strongly encourage you to do so), but the paper you turn in you must write yourself. Homework is due at the *beginning* of class (10:30 sharp); if you cannot make it to class, arrange to either deliver the homework to me early, or have someone else bring it to class for you. Your lowest homework score will be dropped.

Projects (20%) There will be approximately five projects, more in-depth than the weekly homework, tied to the material we are discussing. These will be similar to some of our in-class activities, except that you will solve them outside of class, and write a report of your findings. As with the homework, I strongly encourage you to work with your classmates on the projects, but you must write the report yourself. You are also not permitted to use outside books or the internet to “research” the projects.

Guidelines for writing your reports, and the rubric I will use for grading them, will be handed out separately, later.

Tests (15% each) There will be two in-class tests on the following days:

Fri. 1 Oct.
Fri. 12 Nov.

Makeup tests can be given only in extraordinary and unavoidable circumstances, and with advance notice.

Final (30%) comprehensive

Fri. 10 Dec., 10:00–12:45 p.m.

Attendance: I strongly encourage you to attend every class, though there is no particular grade penalty for absences. My goal is for class activities to be very interactive, and to complement, rather than echo, the textbook, and thus for every class to be worth attending.

Drop date: The deadline for student-initiated drops with a **W** is Mon., 18 Oct. After this date, you can only drop with the Dean's approval, which is granted only under extenuating circumstances.