Graduate Seminar (Teaching Mathematics and Statistics)
Math 5195-005 (CRN # 14855)

WELCOME! ¡BIENVENIDOS! Friday, August 28, 2009

Description from Graduate Catalog: “Conferences and discussions of various topics in mathematics and statistics by faculty, graduate students, and outside speakers. Required of all graduate students during each semester of full-time enrollment. May not be counted more than once toward the degree requirement.”

Course Objectives: Students will explore and discuss concepts and resources of mathematics/statistics education that can directly help them with the students and courses they will be teaching. Students will experience opportunities for structured reflection and formative feedback on their teaching. Students will gain further insight into lesson plans, syllabi (and their policies), technology usage, assessment issues, pedagogical styles, addressing student misconceptions and attitudes, classroom management, and the culture of educational communities. Students will learn how to critique and construct certain elements of a teaching portfolio, including a “Teaching Statement.”

Meetings: Fridays 1:30-2:20 in Bell Hall 130A (except Nov. 27 & Dec. 4) and our “finals week meeting time” would be Dec. 9 at 4-6:45pm; the instructor will announce if there may be any changes to when we meet (e.g., in order to free up time to schedule teaching observations or post-observation conferences)

Instructor: Assoc. Prof. Dr. Larry Lesser (rhymes with “professor”, spelled like “<”) I began teaching university courses (especially statistics!) in 1988, and I’ve also worked as a full-time high school math teacher. My teaching innovations have been recognized with the 2001 AASU Gignilliat Professorship and with several nominations for the ASA’s Waller Education Award. At UTEP, I was appointed as the College of Science representative to the CETaL Fellows, and have been serving since fall 2008. More info and education resources are available from: www.math.utep.edu/Faculty/lesser/ (FYI: you can even access the syllabus there by clicking “SCHEDULE”)

How to reach me: my Bell Hall 213 office hours will start off as M 9:30-10:20, M 1:30-2:20, W 1:30-2:20, and by appointment with additional hours and changes to be announced/posted; also, feel free to ask me (or leave me) questions by phone (747-6845; “SIR-OUIJA”) or email (Lesser (at) utep.edu). It’s my job and privilege to serve you and provide guidance so no need for you to wait a week until our next class meeting to get a question answered. (In fact, I may send an email to the whole class in between some meetings to offer additional information or materials, so check your email regularly.) For your protection, emailed inquiries about confidential information such as grades must be from your UTEP account and accompanied by your 800 number.
Formative Feedback on Your Teaching:
One of the most important and practical parts of this course will be the opportunity for you to get formative evaluation (and perhaps make adjustments) on your teaching this very semester! This will happen in two ways:

* A written Midterm Student Evaluation will be conducted in your class during the last 10-15 minutes of a particular class meeting that you pick; I will supply you with a packet of forms; the day you pick must be between September 14 and October 2 (earlier than that doesn’t give you enough of a “baseline,” later than that doesn’t give you time to make adjustments); you must leave the room during this process and have one of your students volunteer to collect the forms and deliver them to CETaL (in UGLC 124).

* Have your teaching observed during one of the class meetings where you are teaching. (note: if you are not teaching a class this semester, you will satisfy this requirement by “guest teaching” for someone who is; if you are unable to arrange this, let me know; if you are not teaching this semester, you won’t do a Midterm Student Evaluation). We will aim to do this anytime in October – ideally after you have had the chance to get feedback already from the Midterm Student Evaluation. Ideally, this would be the class you received Midterm feedback on so that we have an additional data point for the same class. Ideally, the class will be observed live by some subset of me, CETaL’s Dr. Meeuwsen, and a peer of your choice. In any case, it is required that you coordinate with Karla Ramirez (747-8793; kgramirez@utep.edu; UGLC 124) to schedule a CETaL person coming out with their videocamera to tape the class. This will give you the benefit of later watching your teaching from the students’ perspective, as you receive additional feedback. You are required to email CETaL with at least 2 weeks’ advance notice of when you would like to be videotaped (give a couple of alternate dates, if possible) so that they can arrange for their staff to do the taping. This is only for formative feedback-- the videotape will not be viewed by anyone except you and the faculty giving feedback (e.g., me and/or the CETaL Director), and will be erased after you have watched it and received feedback. Some background about Assessment and Observation methods is at [www.tlataskforce.uconn.edu/docs/resources/Texas_Peer_Observation_Guidelines.pdf](http://www.tlataskforce.uconn.edu/docs/resources/Texas_Peer_Observation_Guidelines.pdf) and at [http://academics.utep.edu/Default.aspx?tabid=58396](http://academics.utep.edu/Default.aspx?tabid=58396).

Grades: letter grade is determined by the usual cutoffs of 90, 80, 70, 60, based on:

* Class participation/attendance (20%): this part is calculated as $100(M - U - E)/M$, where $M = \#$ of class meetings we have, $U = \#$ of days of unexcused absence/nonparticipation, $E = \max\{0, \#$ of days of excused absence/nonparticipation $- 2\}$. This reflects how crucial participation and attendance are for this kind of interactive, beyond-the-book course, but without penalizing someone who has rare (excused) absences.

* Observation of Someone Else’s Teaching (10%). Find a peer or professor who agrees to have you attend one class meeting and complete an observation using a structured form such as Appendix III of the UTEP Peer Observation Booklet. You will give the person you observed a copy of the observation and you will turn in to me (by November 13) a 1-page reflection of the experience of doing the observation, including any challenges or limitations you encountered and what you learned from doing it.

* Attend one teaching-oriented workshop, seminar or class (10%). Anytime this semester before Dec. 4, attend the workshop and write a 1-page summary that includes your own reflection on what was most and least valuable about it. As
long as the content can be applied to mathematics/statistics, there is great flexibility on what you choose: it could be a workshop offered by CETaL, a teaching seminar offered by an academic department, or even a webinar (e.g., http://www.causeweb.org/webinar/).

* Getting structured formative feedback on your teaching (see above section): 10%
* Reflection on Your Fall 2009 Teaching (30%): (due on or before Dec. 2 at noon) typed, 3 pages, 12-point font, 1” margins, double-spaced. This will take into account what you learned (and perhaps what you might or have changed as a result) from the formative feedback you received on your teaching this semester (e.g., Midterm Student Evaluation, videotaped observation, and any further feedback you received or solicited). Include reflection upon your greatest strengths and upon areas that have the most room for improvement.
* Statement of Teaching Goals/Philosophy (20%) (due on or before Dec. 2 at noon) 2 pages, typed, 12 point font, 1” margins, double-spaced; this narrative includes your ideas about teaching and learning, a description of how you teach, and why you teach that way (examples and background on this can be Googled, such as: http://ucat.osu.edu/teaching_portfolio/philosophy/philosophy2.html or http://chronicle.com/article/How-to-Write-a-Statement-of/45133/ or some links at http://academics.utep.edu/Default.aspx?tabid=58396) This statement will grow and develop over your career, but it’s good to start thinking about this from the beginning.
* Quizzes: occasional unannounced quizzes will be taken into account only if your final average falls a point below a letter grade cutoff (i.e., they can only help)

**Textbook:** *A Handbook for Mathematics Teaching Assistants* (Prelim. Ed.) Tom Rishel, Mathematical Association of America http://www.maa.org/programs/tahandbook.html It is your responsibility to “bring this book” to each class, whether you print out your own hardcopy or have it downloaded to your laptop.

**Additional Resources--**

We will also assign and discuss additional articles such as:

and some case studies from Solomon Friedberg et al.’s *Teaching Mathematics in Colleges and Universities: Case Studies for Today’s Classroom* (2001). American Mathematical Society and Mathematical Association of America
useful books on the teaching of mathematics/statistics:


here are some useful websites:

statistics:

http://www.rsscse.org.uk/ts/TBO.html
http://www.stat.auckland.ac.nz/~iase/publications.php
http://www.math.utep.edu/Faculty/lesser/STATResources.html
http://www.amstat.org/education/gaise/GAISECollege.htm
http://www.amstat.org/education/resourcesforundergradteachers.cfm

math/general:

http://archives.math.utk.edu/ICTCM/
http://chronicle.com/jobs/topical/teaching.htm
http://www.phdso.org/career-guide/teaching
http://www.ams.org/employment/job-articles.html
http://www-history.mcs.st-andrews.ac.uk/~history/
http://mathdl.maa.org/mathDL/3/
http://mathforum.org/library/
http://illuminations.nctm.org/
http://www.shodor.org/interactivate/activities/tools.html
http://nlvm.usu.edu/en/nav/vlibrary.html
http://www.magnapubs.com/teachingprofessor/ (UTEP has a free subscription)
http://www.wested.org/online_pubs/CC-09-01_Carr_Math_chapter1.pdf
http://www.math.utep.edu/Faculty/lesser/equity.html
http://www.math.utep.edu/Faculty/lesser/newteacher.html
http://www.math.utep.edu/Faculty/lesser/ResearchResources.html has links for searching for education papers (some are education research, some just pedagogy)
http://www.amatyc.org/ (see “Publications” such as Crossroads)

Be aware of resources provided by UTEP for you or your students:

(e.g., MaRCS: [http://academics.utep.edu/tlc](http://academics.utep.edu/tlc) Library room 218;
CETaL: [http://academics.utep.edu/Cetal](http://academics.utep.edu/Cetal);
Counseling Center: [http://studentaffairs.utep.edu/counsel](http://studentaffairs.utep.edu/counsel) as well as policy issues from the *Handbook of Operating Procedures* [http://admin.utep.edu/Default.aspx?tabid=30181](http://admin.utep.edu/Default.aspx?tabid=30181): check out key items in Section II (chapters 1.3.1, 6.3, 6.4) and Section III (4.2, 4.8.2, 4.8.3, 4.8.4, 4.12, 4.14, 4.15, 4.16, 4.17, 4.19.1).
And feel free to refer students to: [http://www.math.utep.edu/Faculty/lesser/mathtips.html](http://www.math.utep.edu/Faculty/lesser/mathtips.html)
Attendance/Makeup Policy/Military Statement: Attendance is required and taken each meeting using a sign-in sheet and is very important considering that we meet only once a week and much of this course involves beyond-the-book group activities or discussions that are virtually impossible to recreate on one’s own. The instructor may count late arrival, early departure, or blatant nonparticipation as a half-absence or even a full absence, depending on what is missed. If you miss an exam or assignment deadline without a documented strong excuse (e.g., a doctor’s note) relayed to me (preceded by an email or voicemail as soon as you’re aware of the problem) at the earliest opportunity, the score will be a 0. In general (out of fairness and logistics), late work will not be accepted; if it is a borderline violation, late work may be accepted or made up at the instructor’s discretion but is subject to a grade penalty.

It’s your responsibility to....

1. Sign the attendance sheet each day you attend
2. Let me know by email (Lesser (at) utep.edu) or voicemail (747-6845) or daytime math dept. fax (747-6502) at the earliest opportunity if you have a situation which may affect a test, major assessment deadline, or multiple regular class meetings.
3. Give me a written note or email by the 15th day of the semester (Sept. 14) if you will have absence for religious holy days (which are excused, of course).
4. Give me a written note or email as soon as possible if you anticipate the possibility of missing large portions of class time due to exceptional circumstances such as military service/training or childbirth.
5. Have a classmate give you copies of notes, handouts and announcements if you miss a class; write down at least 2 classmates’ contact information right here for this purpose:

   classmate #1 name_____________________ phone____________ email____________
   classmate #2 name_____________________ phone____________ email____________
   classmate #3 name_____________________ phone____________ email____________

As the UTEP Catalog says, “When in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline [Oct. 30] and with a grade of “F” after the course drop deadline.” To be specific, having 3 or more unexcused absences may result in an instructor-initiated drop.

Academic Integrity: As teachers, you especially appreciate that cheating, plagiarism and collusion in dishonest activities are serious acts which erode the university’s purpose and integrity and cheapen the learning experience for us all. Don’t resubmit work completed for other classes without specific acknowledgment and permission from me. It is expected that work you submit will represent your own effort (or your own group’s effort, if it is a group project), will not involve copying from or accessing unauthorized resources or people (e.g., from a previous year’s class). You must cite references that you do consult, using APA style (American Psychological Association, 5th edition or the brand-new 6th edition) with complete citations even for websites and people you consult: http://libraryweb.utep.edu/db/citing.cfm. Violations of the UTEP policy (http://academics.utep.edu/Default.aspx?tabid=23785) may lead to disciplinary action from the Dean of Students (see course #20004 at compliance.utep.edu/training/reviewing.aspx).
For Group Work: Within a group, members are allowed to divide up subsets of the project for which individuals will take the initial responsibility for coordinating efforts, but it is assumed that by the time a group turns in a writeup that all members have read, discussed, and understand all parts of what is being turned in. Group members may even discuss general ideas and strategies with members of other groups, but NOT share parts of actual written work. At a minimum, to be safe, put away all written notes and writing materials and recording devices before having any intergroup conversations. And if you still see a “gray area,” play it safe and ask the instructor!

Civility and Professionalism: Along with basic standards of civility and citizenship (e.g., “Student Conduct” and “Disruptive Acts Policy” in the UTEP Catalog), students in this course are required to exhibit professionalism and to support a constructive, collegial, collaborative classroom culture where critique is focused respectfully on the intellectual merit of a position, not on the person expressing it. (Wrong/incomplete answers are usually correct answers to a different question, and this discussion becomes an opportunity for all to learn.)

As part of showing courtesy to each other and the class as a whole, please do not engage in side conversations when one person (me or a student) is talking to the whole class. Also, do not engage in phone, email, or text conversations during class. You are also expected to use great discretion with cell phones and pagers during class time—if you are truly expecting an urgent call, please let me know and sit near the door to minimize disruption (and have your phone on “vibrate” instead of loud music, and have it handy so you don’t have to dig through a backpack for it). Or you could give your family member or child-care provider the phone numbers for the Math Dept. (747-5761) and Bell Hall ACES lab station (747-8814). That way, you can keep your phone off during class, knowing that staff can quickly get you for a true emergency.

Finally, be open to local opportunities for professional growth and sharing. For example, consider attending/presenting at the Sun or GEPCTM conferences (probably March 4-5, 2010 and October 17, 2009, respectively). Also, encourage K-12 students to enter the ASA Poster Competitions or their local science fair. And consider joining (at cheaper rates while a student!) math ed professional organizations at local (GEPCTM), state (TCTM), or national levels (NCTM or ASA).

Disabilities: If you have or believe you have a disability that will require accommodations or modifications, you may wish to self-identify by contacting the Disabled Student Services Office (DSSO; 747-5148; East Union Building room 106; dss@utep.edu; www.utep.edu/dssol) to show documentation or register for testing and services. DSSO will ask you to discuss needed accommodations with me within the first 2 weeks of the semester or as soon as disability is known, and at least 5 working days before an exam. You are responsible for making sure I receive any DSSO instructions and letters of accommodation. DSSO provides note taking, sign language, interpreter, reader and/or scribe services, priority registration, adaptive technology, diagnostic testing for learning disabilities, assistance with learning strategies/tutoring, alternative testing location and format, and advocacy. Information provided to DSSO is kept confidential.