Research Methods in Speech-Language Pathology/Audiology (ASLP 5775)
University of North Texas
Fall 2017
(Tuesday/Thursday, 11:00-12:20, BLB 050; three (3) graduate credit hours)

| Your professor: | Gloria Streit Olness, Ph.D., CCC-SLP |
| Office* | SPHC 217 | E-mail** | golness@unt.edu | Phone | 940-369-7455 |
| Your T.A. | Mahaley Millican | SPHC 215 | MahaleyMillican@my.unt.edu | 940-369-7382 |

* Office hours with Dr. Olness are by appointment on T/R/F by advance arrangement, at a time mutually agreed upon by student(s) and professor. The T.A. is available for administrative queries (e.g., copying, Blackboard postings) via e-mail.

** The best way to reach the professor or T.A. is by e-mail.

Required resources*


All articles accessed as part of the “Exercises in Critical Readings” as found at the end of each chapter (Chapters 1 through 10) in Orlikoff, Schiavetti, & Metz (2015).

* Use inter-library loan, DOI search online, e-mail request to the corresponding author, ResearchGate, or other free-access resources to obtain all journal articles. At no time should you pay to obtain journal articles, either in this course or during your clinical practice as an SLP.

Suggested resources

Guidelines for writing and formatting of research articles in CSD


Suggested resources (cont.)

Fundamentals of EBP


Fundamentals of research design and statistics, for the evaluator and consumer of research


* particularly accessible and straightforward synopses available in these resources

Course purpose and ASHA KASA standards

Your participation in this course will develop the critical thinking skills you need to evaluate, form opinions about, and draw conclusions from research:

- published research
- clinical research that you conduct during your daily interventions with your clients

**ASHA Standard IV-F**

The applicant (for certification) must have demonstrated knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Implementation: The applicant must have demonstrated knowledge of the principles of basic and applied research and research design. In addition, the applicant must have demonstrated knowledge of how to access sources of research information and have demonstrated the ability to relate research to clinical practice.
Course purpose and ASHA KASA standards (cont.)

Your use of the evidence base to support your clinical practice is one of the foundations of ethical conduct.

**ASHA Standard IV-E**

The applicant (for certification) must have demonstrated knowledge of standards of ethical conduct.

Learning goals of the course will be fostered through engaged reading, group discussion, writing, and public presentation. Proficiency in these forms of communication also leads to fulfillment of ASHA KASA standards.

**ASHA Standard V-A**

The applicant must have demonstrated skills in oral and written or other forms of communication sufficient for entry into professional practice.

**UNT graduate catalog description**

Basic statistical measures, hypothesis formation, models, theories, experimental protocols, and designs in speech, language and hearing research. Prerequisite(s): minimum of three prior/present enrollments in SPHS 5060 (Practicum in Speech-Language Pathology and Audiology) or consent of instructor.

*Note: Emphasis is placed on understanding, interpretation, and critique of clinical and basic research, in support of ethically conducted EBP.*

**Student learning outcomes**

Upon successful completion of this course students will demonstrate the ability to:

- Plan and formulate background and foreground clinical questions that motivate evidence-based practice
  - Describe origins, characteristics, strengths, and limitations of evidence-based practice (E³BP)
  - Formulate clinical questions in PICO, PESICO, PICOT and/or SPICE format as a first step in E³BP
- Find/access the resources that may address clinical background and foreground questions
  - Conduct an electronic search for scientific evidence on a topic of clinical interest
  - Regularly access the most current literature on relevant clinical topics
- Assess the relevance, quality and ethics of journal-based and clinic-based research, in support of evidence-based clinical practice
  - Discuss research concepts using scientific terminology
  - Evaluate and critique the various components of a research article
  - Discuss issues related to the responsible conduct of research
- Apply and integrate the evidence base into the design and implementation of clinical intervention
  - Synthesize literature to address a clinical EBP question
  - Conduct and present clinical case decision-making on one case, using E³BP criteria
  - Effectively and efficiently communication EBP foundations of clinical practice to clients, clients’ family and friends, and the general public

**What this achievement will take on your part**

1. Thoughtful completion of the reading and homework assignments on a given topic area, prior to in-class discussion of said topic area, which includes
   - formulation of questions on the reading and homework content prior to in-class discussion
2. Active participation in class discussions
3. Thorough and careful completion of course homeworks, papers, and other learning activities
My commitment as professor

1. Careful selection of readings and other course materials
2. Careful preparation of audio-visuals, homework assignments, and projects
3. Thoughtful guidance in support of student learning during in-class discussions of student questions and the critical thinking exercises prepared by students
4. Availability for discussion of course content and student progress
5. Provision of feedback on your learning, via the exams, critical thinking exercises, papers and student presentations

Assessing your development

Your performance in the course will be assessed using variety of learning activities:

<table>
<thead>
<tr>
<th>Reflective papers (A &amp; B)</th>
<th>10%: 5% each, full credit ‘A’ based on completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main-point &amp; question (MPQ) summaries of assigned readings, prepared and submitted by the learner in advance of in-class discussions</td>
<td>20%: Weighted as 2% of course grade for each of ten MPQs prepared by the learner ‘A’—Complete coverage, including one’s questions ‘B’—Partial coverage, a few key points missing/unquestioned ‘C’—Partial coverage, several key points missing/unquestioned</td>
</tr>
<tr>
<td>Exercises in critical reading (ECR): • prepared by small group in advance of class discussion • may be modified following class discussion and prior to submission</td>
<td>15%: Weighted as 1.5% of course grade for each of ten randomly selected responses to a critical thinking question written by your group; grade applies to all group members ‘A’—Complete and accurate coverage ‘B’—Partial coverage, a few key points missing or incorrect ‘C’—Partial coverage, several key points missing or incorrect</td>
</tr>
<tr>
<td>Three (3) take-home examinations</td>
<td>30%: 10% each</td>
</tr>
<tr>
<td>Clinical EBP paper and 5-minute “elevator talk” presentation</td>
<td>20%: 15% paper, 5% presentation</td>
</tr>
<tr>
<td>Journal alerts project</td>
<td>5%: grading based on project rubric</td>
</tr>
</tbody>
</table>

Unless otherwise stated, examinations, papers, and projects will be graded on a “plus-minus letter grade” system, in which ‘A+’ is worth 4.33 points ‘A’ is worth 4.00 points ‘A−’ is worth 3.66 points ‘B+’ is worth 3.33 points ‘B’ is worth 3.00 points ‘B−’ is worth 2.66 points ‘C+’ is worth 2.33 points ‘C’ is worth 2.00 points ‘C−’ is worth 1.66 points etc.
About the reflective papers. These are designed to deepen purposeful learning. Students reflect on their personal learning goals for the course at the start of the course, and then perform a retrospective assessment of the degree to which they have met these personal learning goals by the end of the course. Grading based on completion.

About the main point and question (MPQ) summaries. The purpose of MPQs is to engage each learner with the content of the course readings, in advance preparation for class discussion of the points and issues that are raised in the readings. To document that the learner has prepared for the in-class discussion, the MPQ is turned in, in writing, on the day of the class discussion. Please retain a copy of your submitted MPQ for your reference before you turn it in; it will not be returned to you, so that course documentation may be filed by the instructor per university policy.

Each learner prepares a written MPQ for submission. The MPQ may be typed or written by hand, to accommodate the learning style of the individual learner. The MPQ consists of:

- a written summary of the hierarchically arranged main points (MPs) in the assigned reading; the hierarchical arrangement of this content will commonly follow the arrangements of headers, sub-headers, and sub-sub-headers as found on pages xii-xvii of the text (for textbook readings) and headers and sub-headers of other readings
- inclusion of questions (Qs) broadly defined, which may include: questions about concepts or topics in the reading that the learner does not understand; reactions to the content that come to the learner’s mind as the learner encounters the content; critical points of agreement or disagreement regarding the points raised in the readings; and/or possible clinical applications, extensions or combinations of concepts that come to the mind as the learner engages with the material.
  - The “Q” portions of the MPQ may be placed either within and/or at the end of the MPQ summary. If Qs are placed within the text of the MPQ, please highlight them clearly for purposes of reference during class discussion and for purposes of grading of the MPQs.

The process that the learner uses to prepare his or her MPQ is flexible, to accommodate the individual’s learning style. The learning goal is to study, contemplate, and prepare for in-class discussion of the chapter material in its entirety, in whatever fashion the student chooses to accomplish that. The verification of having met the learning goal, and a description of the learner’s approach to MPQ preparation, must be documented by the learner as follows at the top of each submitted MPQ, as follows:

______ (initial with your own initials) I verify that I have read, discussed with classmates, and/or studied and deliberated each of the MPs in the MPQ that I have submitted. The methods I used to advance-study the MPs, as reflected in my submitted MPQ were (check all that apply):

______ I read, scanned, or referenced chapter content
______ I typed/wrote MPs associated with my reading
______ I discussed main points with a classmate or classmates
______ I typed/wrote MPs based on my discussion with classmates
______ I scanned and referenced the chapter during discussions with classmates
______ I scanned and referenced the chapter during my study of written MPs
______ I read/studied written MPs prepared by classmates
______ Other ____________________________

______ (initial with your own initials) I verify that the “Q” portion of my submitted MPQ (where Q = questions, reactions, points of debate or clinical application, etc.) were written by me individually based on my thinking about and engagement with the chapter content.
About the Exercises in Critical Reading (ECR). The purpose of the ECRs is to support and promote group discussion of real-life applications, issues and concepts introduced in the readings and drawn from the literature in our field. The learning goals are: to support student learning; to maximize the learner’s long-term integration of key concepts and issues into their professional practice; and to develop and encourage life-long learning, critical thinking, and career-long engagement in discussion with fellow professionals.

At the end of each chapter in the textbook, learners will find 12 Exercises in Critical Reading (ECR), derived from the literature in our field. Each learner small-group (of three to four learners each) will discuss and prepare written responses to each of the 12 exercises for each chapter, in advance of the in-class discussion of these critical readings. All members of the group are responsible for studying and being familiar with the questions, responses, and article-derived foundations for the responses to each of the 12 ECRs.

Following in-class discussion, small groups may elect to augment or modify their written responses based on in-class discussion; these modified responses, if the group elects to prepare them, will be due on the next class meeting day, following the day of in-class discussion. For each small group, ten of the written responses across the full term will be randomly selected for grading, and the group’s grade for this portion of the course will be calculated accordingly. Verification that all group members have met the ECR learning goals must be documented by the each member of the group at the top of each submitted ECR, as follows:

I verify that I have read, discussed with my group members, and/or studied and deliberated the questions, question responses, and article-derived bases for responses for each of the 12 ECRs in advance of class discussion, as reflected in the written document the group brought to class on the day of the discussion

_______ (signed initials of group member 1)
_______ (signed initials of group member 2)
_______ (signed initials of group member 3)
_______ (signed initials of group member 4, if any)

I verify that I have discussed and deliberated with my group members any corrections or augmentations of my group’s revised ECR submission, in advance of our group’s submission of the written ECR responses.

_______ (signed initials of group member 1)
_______ (signed initials of group member 2)
_______ (signed initials of group member 3)
_______ (signed initials of group member 4, if any)

About the examinations. Exams cover readings, lectures, and discussions up to and including the time of exam distribution. The format of the examinations may include multiple-choice, matching, labeling, short answer, and short essay. Question format is tailored to the nature of the content being assessed. Exams are take-home and will be completed and turned in no earlier than two weeks after the date of exam distribution.

About the EBP paper and presentation. This project is designed to give you hands-on experience in applying EBP with a client of your choice (actual client or realistic hypothesized client), to enhance your practical ability to apply EBP throughout your career.

About the journal alerts project. Completion of this project will link you directly to the newest research literature as it emerges for a set of journals selected by you based on your clinical interests. These are links that you can retain and use throughout your professional career.
**Make-up policy**

**Homeworks.** On-time submission of assigned homeworks is strongly encouraged. Late submissions will be accepted only by prior arrangement with the instructor.

**Exams.** Take-home exams will be prepared and distributed based on the course content that immediately precedes test distribution, as indicated on the course chronology. Exam due-dates will be arranged to allow no less than two week for learners’ preparation of exam responses.

**Materials which are not distributed in class** will be posted throughout the semester on Blackboard Learn. Items distributed in class will not be posted to Blackboard. Please make arrangements with classmates accordingly if you need to miss class. To access Blackboard Learn go to [https://learn.unt.edu](https://learn.unt.edu) and login with your EUID and password.

**Attendance**

Regular attendance in class and participation in class discussions is strongly encouraged for all students. Note that studying from audiovisuals and readings alone without participation in class discussions is insufficient for learning the material.

It is to your distinct advantage to arrange to obtain thorough notes from class members when you are unable to attend and participate in lecture sessions. Please plan accordingly if you need to miss class. If you must miss class, please arrange through another student for your assignment to be submitted on the due date as specified on the syllabus. Late submissions will not be accepted and will earn a grade of zero (‘F’) accordingly.

**Office of Disability Accommodation (UNT policy version 11-20-12)**

The Department of Speech and Hearing Sciences cooperates with the Office of Disability Accommodation (ODA) to make reasonable accommodations for qualified students with disabilities (cf. Americans with Disabilities Act and Section 504, Rehabilitation Act). We encourage all students with disabilities to register with the ODA. If you experience any problems in arranging reasonable accommodation with the ODA, please contact the departmental chair or the ODA directly.

“The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at [http://www.unt.edu/oda](http://www.unt.edu/oda). You may also contact them by phone at 940.565.4323.”

**Academic Integrity**

Academic integrity is expected of all students at all times. Issues related to cheating, plagiarism, or other behaviors inconsistent with the UNT student code of conduct will be dealt with according to university guidelines. (Refer to UNT Student Code of Conduct). Please note that it is the instructor’s belief that cheating
by students can be a gateway to unethical professional behavior. As a result, such behavior will always be addressed by the instructor. Visit http://www.vpaa.unt.edu/academic-integrity.htm for more information.

Exams are to be completed on your own; please no discussion of exams with classmates until after the exam is turned in. Exams are designed to assess learning by the individual. However, you are invited to work with classmates on the MPQs, exercises in critical readings, clinical EBP paper, and journal alerts project.

**UNT Academic Dates**

Students are responsible for verifying the university deadlines such as census date, last day for auto W, last day to drop with either W or WF, beginning date to request an incomplete, last day to withdraw, and last class day.

For official dates and a complete schedule, refer to Registrar’s website http://essc.unt.edu/registrar/schedule/fall/calendar.html

**Note**

- If there are any policy changes (i.e. grading, attendance) during the semester, a new/revised syllabus will be issued and given to all students.
- The course syllabus is on file in the ASLP departmental office.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Content of lecture and in-class discussion</th>
<th>In advance of class</th>
<th>In class</th>
<th>Projects/exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 29</td>
<td>Orientation to course and small group formation EBP: Expanding our model</td>
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<td>Reflective paper A assigned (on Blackboard)</td>
</tr>
<tr>
<td>2</td>
<td>Aug 31</td>
<td>Asking clinical questions in EBP</td>
<td>MPQ completion – Dollaghan, Ch. 1</td>
<td>Submit MPQ for Dollaghan, Ch 1</td>
<td>Reflective paper A due</td>
</tr>
<tr>
<td>3</td>
<td>Sep 5</td>
<td>Evidence-based practice in communication disorders</td>
<td>MPQ completion – OSM Ch. 1</td>
<td>Submit MPQ for OSM Ch. 1 and related content</td>
<td>Journal alerts project assigned by today</td>
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<td></td>
<td>Sep 7</td>
<td></td>
<td>Small group preps ECR responses, OSM, Ch. 1</td>
<td>Discuss ECRs, OSM Ch. 1 and related content</td>
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<tr>
<td></td>
<td>Sep 12</td>
<td>Assessing the logical flow of the introduction section of the research article, including research questions and hypotheses</td>
<td>MPQ completion – OSM Ch. 2</td>
<td>Submit MPQ for OSM Ch. 2 and related content</td>
<td>Target date for having submitted your e-mails to target journals, to receive journal alerts</td>
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<tr>
<td></td>
<td>Sep 14</td>
<td></td>
<td>Small group preps ECR responses, OSM, Ch. 2</td>
<td>Discuss ECRs, OSM, Ch. 2 and related content</td>
<td>Intro and discussion of clinical EBP paper and presentation assignment</td>
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<tr>
<td></td>
<td>Sep 19</td>
<td>Research strategies in communication disorders: quantitative, qualitative, and mixed</td>
<td>MPQ completion – OSM Ch. 3</td>
<td>Submit MPQ for OSM Ch. 3 and related content</td>
<td>Exam 1 distribution by Wednesday, September 20</td>
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<td>Sep 21</td>
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<td>(OSM Ch. 3 discussion cont.)</td>
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<td>Sep 26</td>
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<td>Small group preps ECR responses, OSM, Ch. 3</td>
<td>Submit Ch. 2 ECRs by next class session</td>
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<td>Sep 28</td>
<td>Research design in communication disorders: quantitative, qualitative, and mixed; validity; pilot research</td>
<td>MPQ completion – OSM Ch. 4</td>
<td>Submit MPQ for OSM Ch. 4 and related content</td>
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<td>Oct 3</td>
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<td>(OSM Ch. 4 discussion cont.)</td>
<td>Exam 1 due by COB today</td>
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<td></td>
<td>Oct 5</td>
<td></td>
<td>Small group preps ECR responses, OSM, Ch. 4</td>
<td>Discuss ECRs, OSM, Ch. 4 and related content</td>
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<td></td>
<td>Oct 10</td>
<td>Experimental designs for studying treatment efficacy</td>
<td>MPQ completion – OSM Ch. 5</td>
<td>Submit MPQ for OSM Ch. 5 and related content</td>
<td>Distribution of written clinical EBP paper assignment as discussed in class</td>
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<tr>
<td></td>
<td>Oct 12</td>
<td></td>
<td>Read Koerth-Baker (2014)</td>
<td>(OSM Ch. 5 discussion cont.)</td>
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<td></td>
<td>Oct 17</td>
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<td>Small group preps ECR responses, OSM, Ch. 5</td>
<td>Discuss ECRs, OSM, Ch. 5 and related content</td>
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<tr>
<td></td>
<td>Oct 19</td>
<td>The method section of the research article</td>
<td>MPQ completion – OSM Ch. 6</td>
<td>Submit MPQ for OSM Ch. 6 and related content</td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Content of lecture and in-class discussion</td>
<td>In advance of class</td>
<td>In class</td>
<td>Projects/exams</td>
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<tr>
<td>9</td>
<td>Oct 24</td>
<td>“”</td>
<td>Small group preps ECR responses, OSM, Ch. 6</td>
<td>Discuss ECRs, OSM, Ch. 6 Submit Ch. 6 ECRs by next class session</td>
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<tr>
<td></td>
<td>Oct 26</td>
<td>The results section of the research article: Findings</td>
<td>MPQ completion – OSM Ch. 7</td>
<td>Submit MPQ for OSM Ch. 7 Discussion of OSM Ch. 7 and related content</td>
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<tr>
<td>10</td>
<td>Oct 31</td>
<td>“”</td>
<td>Small group preps ECR responses, OSM, Ch. 7</td>
<td>Discuss ECRs, OSM, Ch. 7 Submit Ch. 7 ECRs by next class session</td>
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<tr>
<td></td>
<td>Nov 2</td>
<td>The results section of the research article: Statistical inference</td>
<td>MPQ completion – OSM Ch. 8</td>
<td>Submit MPQ for OSM Ch. 8 Discussion of OSM Ch. 8 and related content</td>
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<tr>
<td>11</td>
<td>Nov 7</td>
<td>“”</td>
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<td>(OSM Ch. 8 discussion cont.)</td>
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<td></td>
<td>Nov 9</td>
<td>(no class meeting; ASHA meeting; use class day for ongoing work or ASHA participation)</td>
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<td>Exam 2 distribution by Friday, November 10</td>
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<tr>
<td></td>
<td>Nov 14</td>
<td>The results section of the research article: Statistical inference (cont.)</td>
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<td>(OSM Ch. 8 discussion cont.)</td>
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<tr>
<td></td>
<td>Nov 16</td>
<td>“”</td>
<td>MPQ completion – OSM Ch. 9 Target date for small group to complete ECR responses, OSM Ch. 8</td>
<td>(OSM Ch. 8 discussion cont.) Discussion of any questions that groups may have about Chapter 8 ECRs Submit MPQ for OSM Ch. 9 (Note: This is the last MPQ submission)</td>
<td>Distribution of previously distributed written EBP paper assignment, with accompanying presentation assignment, with rubric, by November 17</td>
</tr>
<tr>
<td>13</td>
<td>Nov 21</td>
<td>The discussion and conclusion Best evidence and clinical decision-making</td>
<td>Target date for small group to complete written ECR responses for Chs. 9 and 10</td>
<td>Discussion of OSM Chs. 9 and 10, and related content Discussion of any questions that groups may have about Ch. 9 ECRs or Ch. 10 ECRs</td>
<td>Exam 2 due by COB today</td>
</tr>
<tr>
<td></td>
<td>Nov 23</td>
<td>THANKSGIVING BREAK</td>
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<td></td>
<td>Nov 28</td>
<td>Clinically applied EBP; communicating among ourselves and with others</td>
<td>Read Chapters 1-3 of Nichols (2017)</td>
<td>Submit ECR responses for Chapters 8, 9 and 10 Discussion of Nichols (2017)</td>
<td>Journal alert docum’n due today Exam 3 distribution by today</td>
</tr>
<tr>
<td>14</td>
<td>Nov 30</td>
<td>“”</td>
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<td>Student EBP clinical presentations</td>
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<tr>
<td></td>
<td>Dec 5</td>
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<td>Student EBP clinical presentations</td>
<td>Clinical EBP papers due today</td>
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<tr>
<td>15</td>
<td>Dec 7</td>
<td>“”</td>
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<td>Student EBP clinical presentations</td>
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<td></td>
<td>Dec 12</td>
<td>Final Exam Time per UNT Registrar: 10:30am – 12:30 pm</td>
<td>Multiple choice, take-home exam #3 due by 12:30 on December 12. Reflective Paper B posted on Blackboard at 12:30 on Tuesday, December 12.</td>
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<td></td>
<td>Dec 14</td>
<td>Reflective paper B must be written and turned in AFTER turn-in of final exam. Reflect paper B response is due no later than Thursday of final week, 5:00pm.</td>
<td></td>
<td>Important note: People who turn in their take-home exam early have the option to receive their Reflective Paper B question immediately after turning in the exam. Please contact Dr. Olness to arrange.</td>
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