



FRAN*6610: Advances in Clinical Nutrition/Assessment Course Outline - Fall 2015

Instructor

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Class Time

Mondays, 8:30-11:20AM, MacKinnon 308

Office Hours

Visits welcomed – please make an appointment.

Course Description

Welcome to Advances in Clinical Nutrition/Assessment. This is an interactive, skills- and process-based course focused on: integrating nutritional assessment and clinical nutrition; applying theory to practice; and refining advanced critical thinking and oral and written communication skills. A large portion of the course is based on student-driven learning activities and discussion.

Learning Outcomes

By the end of this course, successful students will:

- Demonstrate advanced critical thinking, integrative and communication skills in clinical nutrition/assessment by:
 - Researching and writing a systematic literature review OR a PEN[®] (Practice-Based Evidence in Nutrition) pathway suitable for publication.
 - Creating and delivering a 30 to 40 minute oral presentation/workshop using your choice of delivery method.
- Provide formative and constructive feedback on peers' oral and written efforts.

Prerequisites

I assume that you are familiar with basic nutritional assessment methods (dietary, clinical, biochemical, anthropometric) and clinical nutrition issues and interventions in common populations (diabetes, cardiovascular disease, GI, etc.).

Learning Activities

Choose one of the following written assignments	Choose one of the following oral presentations/workshops, on the same topic as the written assignment. (Independently, or if your topics overlap, with a partner.)
Systematic literature review (SLR) OR	Critique of an original research article from the topic area OR
Practice-Based Evidence in Nutrition (PEN [®]) adapted pathway	Present a controversy/debate within the topic area OR
	Teach a class to dietitians new to this area of practice OR
	Teach a class to patients diagnosed with the condition associated with your topic

Evaluation

Learning Activity	Weighting	Due Date
<u>SLR/PEN</u> outline	5%	Mon Oct 19, in Dropbox
<u>SLR/PEN</u>	Your choice (minimum 20%)*	<ul style="list-style-type: none"> • Mon Nov 30, hard copy of near-final draft due at beginning of class (for peer review) • Mon Dec 7, final copy in Dropbox
<u>Peer review of SLR/PEN</u>	15%	Mon Nov 30. To be completed in class, in real time. Email review to peer; cc Andrea.
<u>Oral presentation on a topic related to your SLR/PEN</u>	Your choice (minimum 20%)*	Throughout
<u>Engagement</u>	15%	Throughout. Self-reflection on engagement due Mon Dec 7, in Dropbox

*Decide the weighting by the beginning of class on Mon Oct 19

Schedule*

Date	Topic/Activity
Sept 14	<ul style="list-style-type: none"> • Course introduction • Dysphagia screening and management • Readings: <i>(available on CourseLink)</i> <ul style="list-style-type: none"> ○ Course outline ○ Dysphagia screening and management notes
Sept 21	<ul style="list-style-type: none"> • Practice-Based Evidence in Nutrition (PEN[®]) • Readings: <ul style="list-style-type: none"> ○ Appendix 1 of course outline ○ BOPPPS instructional model (in Appendix 3) ○ Formative vs. summative feedback <i>(available on CourseLink)</i>
Sept 28	<ul style="list-style-type: none"> • Systematic Literature Reviews • Readings: <i>(available on CourseLink)</i> <ul style="list-style-type: none"> ○ Appendix 2 of course outline ○ Edwards M. What is a systematic review? July 2014 ○ Exemplar: Gough E, Shaikh H, Manges A. Systematic review of intestinal microbiota transplantation (fecal bacteriotherapy) for recurrent <i>Clostridium difficile</i> infection. Clin Infect Dis. 2011;53(10):994-1002.
Oct 5, 12	<i>NO CLASS</i>
Oct 19- Nov 23	<ul style="list-style-type: none"> • Oct 19: SLR/PEN outline due in Dropbox; have chosen weighting of SLR/PEN and oral presentation • Oral presentations
Nov 30	Submit hard copy of near-final draft of SLR/PEN for peer review. Complete peer review of a classmate's SLR/PEN, in class and in real time. Email electronic copy of peer review to peer (cc Andrea)
<i>Dec 7 (no class)</i>	<i>Electronic copy of SLR/PEN and reflection on participation due in Dropbox</i>

*I'd like the opportunity to adjust the schedule as needed. I will do so only if I provide you with adequate notice and rationale.

CourseLink

CourseLink will be used for the gradebook and for helpful resources including exemplar PEN pathway and SLR from F14. <https://courselink.uoguelph.ca/shared/login/login.html>

Course Readings

There is no course text. Readings are assigned as per above schedule, and are available on CourseLink, under the “Content” tab.

E-Mail

As per university policy, check your <uoguelph.ca> email account regularly. E-mail is the official route of communication between students and the university.

Your Role

As with any course, you will get out of Advances in Clinical Nutrition/Assessment what you put into it. I have carefully chosen the readings, learning activities and course requirements to help facilitate your learning; whether you actually do these and learn is up to you. I look forward to your active engagement, including helping to keep class discussions alive and providing peers with constructive feedback on oral and written efforts.

In the words of a famous academic*: students paddle, the instructor steers.

**My husband*

My Role

As I see it, I’m here to help you help yourself learn. This includes creating a supportive and respectful classroom culture conducive to learning; facilitating class discussions (with your help and engagement); guiding your learning by posing, and responding to, questions; and, providing formative feedback on various learning activities (written, oral and participatory efforts).

Resources - Clinical

- PEN (Practice-Based Evidence in Nutrition) is accessed through the university’s library website. You’ll need your standard login information.
 - Cut and paste the following url into your browser: http://primo.tug-libraries.on.ca.subzero.lib.uoguelph.ca/primo_library/libweb/action/search.do?vid=GUELPH&reset_config=true .
 - Enter “practice-based evidence in nutrition” in the Primo search field.
 - Click on the blue “Online resources.”
- Also available in Primo is the Academy of Nutrition and Dietetics (formerly American Dietetic Association) nutrition care manual.
 - Enter “ADA nutrition care manual” in the Primo search field.
 - Click on the blue “Online resources.”
 - Note: If you are accessing this resource from off campus, you will need to enter the username (lday@uoguelph.ca) and password (uoguelph) on the Nutrition Care Manual website.
- Online medical dictionary: <http://www.nlm.nih.gov/medlineplus/plusdictionary.html>.
- Online pharmacological database: <http://www.nlm.nih.gov/medlineplus/druginformation.html>

- Online Hamilton Health Sciences' Patient Education Library
<http://www.hamiltonhealthsciences.ca/body.cfm?xyzpdqabc=0&id=1238&action=tree>

Resources - Writing

- Edwards M. What is a Systematic Literature Review? July 2014
- PEN and SLR referencing guidelines are posted to CourseLink
- Use RefWorks to manage references for your SLR/PEN. RefWorks is a web-based database manager and bibliography creation tool. It allows you to collect references from a wide variety of electronic resources (e.g., PubMed) to create your own personal reference database. If you use Microsoft Word, your collected references can be seamlessly integrated into your term paper following APA format for the text of the paper and the reference list. Here is quick start guide: <http://guides.lib.uoguelph.ca/RefWorks>

Attention MSc Students!

RefWorks, or some other reference managing program, will be particularly useful when writing your thesis.

Resources – Critiquing a Journal Article

See “Evaluate the Text” in the following link:

<http://www.lib.uoguelph.ca/get-assistance/writing/specific-types-papers/using-scientific-journal-article-write-critical-review>

Policies

Late Penalty and Missed Work

Life is busy; it can be challenging to meet a deadline. That said, your responsibility is to complete the various course requirements on time. ***Contact me as soon as you can about any issues/conflicts with any due dates.***

- Let me know by the beginning of class on Mon Oct 19 your preferred weighting of the SLR/PEN and oral presentation. If you do not declare a preference by Mon Oct 19, the two will be equally weighted.
- The SLR/PEN outline is due Mon Oct 19. If the outline is submitted late, there will be a 10% per day late penalty. You'll still receive feedback; you'll just have less time to address/incorporate the feedback into your final SLR/PEN.
- If you cannot make your scheduled oral presentation date, the options are: (1) if you know ahead of time that you won't be able to present on your scheduled date, it is your responsibility to find a classmate willing to switch dates with you; (2) present to me in my office, one-on-one, at a mutually convenient time; (3) If you can think of a third option, run it by me.
- The near-final draft of your SLR/PEN, in hard copy, is due Mon Nov 30. A classmate will review it *in class, in real time*; you will do the same for a classmate's SLR/PEN. If you are unable to make it on Mon Nov 30:
 - You can still submit a near-final draft up to and including Wed Dec 2. A classmate will still do the peer review, but to be fair to his/her schedule, there is no guarantee you will receive the review in time for the final SLR/PEN submission date.

- You can still provide peer review of a classmate's work, up to and including Wed Dec 2 with a 10% *per day* penalty, unless medical or other suitable documentation is provided. Peer reviews won't be accepted after Wed Dec 2, to give your classmate time to act on feedback prior to the final due date.
- The final SLR/PEN is due Mon Dec 7. There is a 10% per day penalty each day that your work is submitted late, unless medical or other suitable documentation is provided. SLR/PEN won't be accepted after Wed Dec 9.

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor. It is your responsibility to know and abide by rules pertaining to academic misconduct. These rules can be found in the 2015-2016 Graduate Calendar and on the following website: <https://www.uoguelph.ca/graduatestudies/gchandbook/academicmisconduct>

Students who have copied answers from the internet or a published source (i.e., who appear to have engaged in academic misconduct) will be reported to the Chair of Family Relations and Applied Nutrition, who will render a decision, or under certain circumstances, forward a report to the Dean of the College of Social and Applied Human Sciences for a decision. If you're unsure about what constitutes academic misconduct, come talk to me and/or take the Learning Commons' online tutorial on academic integrity, which includes a plagiarism module, at <http://www.academicintegrity.uoguelph.ca/index.cfm>

APPENDIX 1

Practice-Based Evidence in Nutrition (PEN®) Pathway

You can choose to write either an adapted PEN pathway or a systematic literature review

Practice-based Evidence in Nutrition is an evidence-based decision support resource developed by Dietitians of Canada, designed to help dietitians keep pace with food and nutrition research. It provides knowledge pathways on a variety of topics (over 187 and climbing!). PEN pathway authors identify relevant literature from various sources, and then critically appraise, grade and synthesize that literature into key practice points to answer specific practice questions.

Developing a PEN pathway requires excellent literature searching skills and appropriate bounding of the topic, so that the project is neither too small nor too large.

Possible Topics for PEN Practice Questions

If you are interested in **updating practice questions for a topic**, visit www.pennutrition.com to view the list of published practice questions. If you are interested in **creating new practice questions**, visit PEN to confirm that the question has not already been published. Then, create 2 to 4 clearly structured questions using the PICO model.

While a world of possible topics awaits, the good folks at PEN will provide a list of practice questions that PEN would like to see developed or updated. You are free to choose from the list, or you can feel free to choose another topic not listed.

Calling all MSc students!

Perhaps choose practice questions related to your MSc thesis topic – ask your thesis advisor for suggestions. If you do so, feel free to invite your advisor to your presentation.

Or, maybe there is a topic from your undergraduate clinical nutrition/assessment courses and which niggles (i.e., you wanted to learn more). Now's your chance to un-niggle!

Calling all MAN students!

Perhaps choose practice questions from your placement – ask your preceptor for suggestions.

If you do so, feel free to invite your preceptor to your presentation.

Or, revisit your learning plan from the recent Clinical Boot Camp. Is there a topic about which you would like to learn more? Now's your chance!

PEN Pathway Outline (see p. 19 for rubric)

To allow for feedback early in the process, submit a single-spaced, 2-page outline. Include:

- The title of your PEN pathway topic. It should be clear and descriptive.
- Your practice questions. These should be clear and in PICO format.
- The category and subcategory in which your topic falls (the practice area).
- Your methods for searching, including databases and key search terms/words. These should be clear and comprehensive.
- A list of 15 to 20 key references (original research articles, meta-analyses, systematic literature reviews, etc.). The list should be comprehensive, relevant and where possible, recent. While animal studies are fine, the preference where possible is human studies.

How To Write a PEN Pathway

While a complete PEN pathway contains several components, you will create an adapted PEN pathway and so are only responsible for:

- A structured abstract;
- Introduction and background of the topic/condition;
- 2 to 4 practice questions, each accompanied by key practice point(s), evidence grade and evidence;
- An overall summary/conclusion.

You are **NOT** responsible for the other components of a PEN pathway such as the practice guidance summary/toolkit, and related tools and resources

Format

- Your adapted PEN pathway should be 15-20 pages, double-spaced, 12 pt Times New Roman font, 1" margins. Tables, lists, etc., can be single-spaced.
- The page limit excludes title page, references and appendices (if applicable); these should be single-spaced.
- No white extra white space between paragraphs (i.e., maintain double-spacing throughout).
- **Be sure to include both page numbers AND line numbers to facilitate review.**
- Include a structured abstract; introduction and background; 2-4 practice questions with key practice points, evidence grade and evidence; and, an overall summary/conclusion.

Structured Abstract

Provide a structured abstract (250 words or less) and which includes an introduction (including clearly articulated practice questions following PICO model), methods, results and conclusion.

Example PEN Pathway Abstract (from a F14 FRAN*6610 student)

Introduction

Eosinophilic Esophagitis (EoE) is characterized by increased eosinophils in the esophagus, induced by an allergic inflammatory response to food allergens. Several dietary therapies are proposed to treat this disease. This Practice-based Evidence in Nutrition (PEN) pathway will answer the following practice questions: 1. What is the effectiveness of an elemental formula diet on inducing remission of pediatric EoE? 2. What is the effect of a Six Food Elimination Diet (SFED) on the remission of pediatric EoE compared to an allergy led elimination diet? 3. What is the effect of other diets (gluten-free and cow's milk free) on the remission of pediatric EoE?

Methods

A literature review was conducted using Pubmed to locate peer reviewed journal articles. The research was graded according to PEN's Critical Appraisal Tool Evidence Grading Checklist. Key practice points were created, and evidence summaries were written to answer the practice questions outlined above.

Results

- 1) An elemental formula diet can induce remission of pediatric eosinophilic esophagitis in almost all individuals.
- 2) Both the SFED and the allergy-led elimination diet can induce remission of pediatric EoE. While some studies show the SFED to be slightly superior, more research is needed before a final conclusion can be made.
- 3) There is insufficient evidence to suggest either a gluten-free or a cow's milk free diet will induce remission of pediatric EoE.

Conclusion

Although the current literature is not of the highest quality, studies are consistently finding that certain dietary treatments are effective at inducing remission of pediatric EoE.

Introduction and Background

This includes background information about the condition/topic, and should be approximately 3 to 4 pages. It should be sufficiently descriptive so as to provide a practitioner new to the area of practice with the background information needed to understand the context of the practice questions to follow, and may include information such as prevalence, etiology, diagnosis, etc.

The background also includes identifying the PEN practice category (Population Health/Lifecycle; Health Condition/Disease; Food/Nutrients; Professional Practice) to which the pathway belongs, as well as the subcategory (Health Promotion/Prevention; Assessment/Surveillance; Intervention; Evaluation/Outcome Indicators; Education).

Practice Questions

A well written background will set the stage for the 2 to 4 practice questions to follow. Your practice questions should follow the PICO model, described in the table below:

PICO Model for Developing a PEN Practice Question (adapted from PEN Writer's Guide, 2013)	
Population - the relevant patients, clients or groups	<i>Do patients with ileostomies...</i>
Intervention or exposure	<i>who consume a high fibre diet (>20g)...</i>
Comparison or control	<i>compared to those who consume a low fibre diet (5-10g)...</i>
Outcome (what are the patient-, client- or group-relevant consequences of the exposure in which we are interested?)	<i>have a higher incidence of ostomy blockage?</i>

How many practice questions you include depends on how many key practice points are needed to answer each question. If your questions have several accompanying key practice points, then only two questions may be needed. If, on the other hand, your questions have only one key practice point, then four questions may be needed. Let the 15 to 20 page limit for this assignment guide you.

Key Practice Points

A key practice point (KPP) is a statement (typically 1-4 sentences) which directly answers your practice question. It is supported by an evidence grade, and is followed by evidence. Some practice questions require only one KPP; others may require more than one.

Grade of Evidence (see Evidence Grading Checklist posted to CourseLink)

Assign each key practice point a grade of evidence, where a grade of A denotes GOOD evidence; B denotes FAIR evidence; and C denotes LIMITED evidence, or expert opinion. A grade of D means that a conclusion is either not possible or is extremely limited because evidence is unavailable and/or of poor quality and/or is contradictory.

Evidence

This section contains a study-by-study summary of the evidence which supports your key practice point. Each paragraph stands alone and is a short description of the study or meta-analysis or systematic literature review you deemed sufficiently important to help answer your key practice point.

Putting it All Together: How to Present Your Practice Question, Key Practice Point, Grade of Evidence and Evidence

Practice Question (repeat format for each question, and based on PICO model)

Key Practice Point (repeat format for each practice point)

1....

Grade of Evidence (A, B, C or D)

Evidence

a....

b....

Key Practice Point

2.... [*second KPP if the practice question requires it; otherwise one KPP is fine*]

Grade of Evidence (A, B, C or D)

Evidence

a....

b....

Example Practice Question, Key Practice Point, Grade of Evidence and Evidence (adapted from F14 FRAN*6610 student)

Practice Question: Do children with Autism Spectrum Disorder (ASD) who follow a gluten-free casein-free (GFCF) diet, compared to those who do not, experience greater nutritional deficiencies?

Key Practice Point

1. In a published practice point, dietary assessment by a registered dietitian is recommended for children following the GFCF for ASD management due to the likelihood of calcium deficiencies and inadequate intake of milk and alternatives (12). Since the publication of this recommendation, additional observational studies investigating nutritional outcomes related to the GFCF diet have resulted in similar findings. Dietary assessment is recommended for children with ASD who follow the GFCF diet, due to the potential for adverse health outcomes resulting from nutritional inadequacies associated with strict dietary restrictions.

Grade of Evidence: C

Evidence

- a. In a longitudinal study, children (aged 1 to 6 years) participated in clinical evaluations that resulted in diagnosis into one of three groups: autism (n=69), non-autism developmental delay (n=14), and normal development (n=37). Caregivers completed a three-day food record, which was assessed and analyzed by a dietitian to compute a Healthy Eating Index (HEI). Blood samples and anthropometric measures were obtained from the participants. All groups were similar in their inadequate intakes of vegetables, fiber, and vitamin D. Autistic and developmentally delayed children were similar in overall dietary measures. However, compared to controls showing normal development, autistic children were more likely to consume inadequate calcium and dairy due to restricted diets. For autistic children following restricted diets, intake of dairy, folate, and grains was particularly low (22).
- b. A retrospective cross-sectional study investigated...
2. [*A second key practice point may or may not be needed to support your practice question.*]

Grade of Evidence:...

Etc.

Summary/Conclusion

Finish your adapted PEN pathway with a one-paragraph conclusion summarizing your practice questions and key practice points, and providing (an) overall “take away” message(s) for practitioners and recommendations for future research.

Example Conclusion (adapted from F14 FRAN*6610 student)

In summary, the most effective dietary treatment to induce the remission of pediatric eosinophilic esophagitis (EoE) is an elemental formula diet. Both the six-food elimination diet (SFED) and the allergy-led elimination diet are effective at treating EoE, but not as effective as an elemental formula diet. While there is some evidence that the SFED may work better than the allergy-led elimination diet, more research is needed before a firm conclusion can be drawn. When deciding in practice which diet is most appropriate for children with EoE, balance the effectiveness rate shown in the literature, with the social and financial burden associated with each diet. Lastly, the gluten-free and cow’s milk free diet do not have sufficient evidence to support their use in the treatment of pediatric EoE. Currently the research on the dietary treatment of EoE is mostly comprised of small, poorly designed studies. Future research should include larger more controlled trials. Overall, although the literature is currently composed of retrospective, prospective, and case report studies, the results are consistent in showing that certain diets can be an effective therapy. Furthermore, dietary therapies are currently being used in practice to treat pediatric EoE.

Referencing (adapted from PEN Style Guide posted to CourseLink)

Reference numbers in the text should be cited by using numbers in parenthesis at the end of the first sentence that refers to the material cited, before the period, such as (1). Do not use superscripts. Multiple sequential referencing should be listed with the first and last number with a hyphen separating the two numbers e.g., (1-3).

How to Reference a Journal Article

French MR, Moore K, Vernace-Inserra F, Hawker GA. Factors that influence adherence to calcium recommendations. Can J Diet Pract Res. 2005 Spring;66(1):25-9.

- List all authors when six or fewer; when six or more, list only the first six and add "et al."
Example: Smith A, Jones B, Smith C, Jones D, Smith E, Jones F, et al.
- Abbreviate periodical titles according to Index Medicus. If a title does not appear in Index Medicus, provide the complete title.

Evaluation

Your work will be graded according to the criteria in the evaluation (p. 13 to 16). This is also the same form that your peer reviewer will use to evaluate your PEN pathway.

The adapted PEN pathway is worth a minimum of 20% of your final grade. Decide on your preferred weighting for the PEN pathway and oral presentation by the beginning of class on Mon Oct 19.

FRAN*6610 Adapted PEN Pathway - EVALUATION

Adapted from *PEN Writers' Guide Reviewer Checklist*, March 2013, used to evaluate PEN pathways submitted for publication on www.pennutrition.com.

Author: _____

Reviewer: _____

Abstract

Abstract
= (x10)/20
= /10

1. Are the practice questions appropriately supported?

1	2	3	4	5
(no)		(improvement required)		(yes)

2. Are the methods used clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

3. Are the major results clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

4. Are the main conclusions clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

Introduction/Background

Introduction
= (x10)/5
= /10

5. Is the background sufficiently descriptive so as to provide a practitioner new to the area with the information needed to understand the context of the practice questions to follow?

1	2	3	4	5
(no)		(improvement required)		(yes)

Practice Questions

Practice Questions
= /5

6. Are practice questions written in a clear, concise manner consistent with PICO?

1	2	3	4	5
(no)		(improvement required)		(yes)

Key Practice Points

Key Practice Points
= /20

7. Are they clearly written?

1	2	3	4	5
(no)		(improvement required)		(yes)

8. Are they comprehensive (no other practice points need to be made to answer practice questions)?

1	2	3	4	5
(no)		(improvement required)		(yes)

9. Are they **important** (will make an important difference to practice)?

1	2	3	4	5
(no)		(improvement required)		(yes)

10. Are they **applicable/practical** (information can be applied to practice setting – consider feasibility, cost issues, etc.)?

1	2	3	4	5
(no)		(improvement required)		(yes)

Evidence Statements Supporting Key Practice Points

Evidence
= /15

11. Is the evidence graded appropriately?

1	2	3	4	5
(no)		(improvement required)		(yes)

12. Are the studies **clearly** explained?

1	2	3	4	5
(no)		(improvement required)		(yes)

13. Are the studies **succinctly** explained?

1	2	3	4	5
(no)		(improvement required)		(yes)

Summary/Conclusion

Summary/Conc
= (x15)/20
= /15

14. Are the key practice points clearly summarized?

1	2	3	4	5
(no)		(improvement required)		(yes)

15. Is the quality of evidence considered?

1	2	3	4	5
(no)		(improvement required)		(yes)

16. Does the summary/conclusion provide helpful "take away" message for practitioners?

1	2	3	4	5
(no)		(improvement required)		(yes)

17. Are future directions for research indicated?

1	2	3	4	5
(no)		(improvement required)		(yes)

References

References
= (x5)/15
= /5

18. Are the references appropriate in **number**?

1	2	3	4	5
(no)		(improvement required)		(yes)

23. Are the references appropriate in **quality**?

1	2	3	4	5
(no)		(improvement required)		(yes)

24. References (in text and in reference list) are cited appropriately.

1	2	3	4	5
(no)		(improvement required)		(yes)

General considerations
= (x20)/5
= /20

General Considerations

25. Is the pathway well-presented and well-written (including spelling, grammar, sentence structure, punctuation; follows formatting guidelines specified in assignment description)?

1	2	3	4	5
(no)		(improvement required)		(yes)

TOTAL /100

APPENDIX 2

Systematic Literature Review (SLR)

You can choose to write either a systematic literature review or an adapted PEN pathway

Developing a systematic literature review requires excellent literature searching skills and appropriate bounding of the topic, so that the project is neither too small nor too large.

Possible Topics

- Clinical conditions/populations such as:
 - Renal
 - Critical care/ICU
 - Surgery
 - Inborn errors of metabolism (e.g., phenylketonuria (PKU))
 - Thermal trauma
 - Pre-term birth
 - Failure to thrive (FTT)
 - Organ transplant
 - HIV/AIDS
 - Obesity and mental health
 - Diet and mental health (i.e., food and mood)
 - ???
- Sleep and body weight/composition
- Diet quality measures/scores
- FODMAP (fermentable oligo-di-monosaccharides and polyols)
- Nutrition support (enteral, parenteral)
- Drug-nutrient interactions
- ???

Note

The above list is by no means exhaustive. If none of the above topics catches your eye, suggest an alternative. Try browsing the Hamilton Health Sciences' Patient Education Library for ideas: <http://www.hamiltonhealthsciences.ca/body.cfm?xyzpdqabc=0&id=1238&action=tree>

Your topic should not have had a meta-analysis or Cochrane review completed, unless these are dated and new original research is available.

SLR Outline ([see p. 19 for rubric](#))

To allow for feedback early in the process, submit a single-spaced, 2-page outline consisting of:

- The title of your SLR. It should be clear and descriptive.
- Your research question. It should be clear and in PICO format.
- Your methods for searching, including databases and key search terms/words. These should be clear and comprehensive.
- A reference list of 15 to 20 key primary studies. The list should be comprehensive, relevant and, where possible, recent. While animal studies are fine, the preference where possible is human studies.

How to Write a SLR

Your systematic literature review should include a structured abstract (not exceeding 250 words), introduction, methods, results, discussion (including limitations and suggestions for future research) and a conclusion.

A “quick n’ dirty” resource is: Edwards M. What is a systematic review? July 2014.

A more detailed how-to is: Wright RW et al. How to write a systematic review. Clin Ortho Rel Res. 2007. 455:23-9. *Both resources are available on CourseLink.*

Format

- The SLR should be 15-20 pages, double-spaced, 12 pt Times New Roman font, 1” margins. Tables, lists, etc., can be single-spaced.
- The page limit excludes title page, references and appendices (if applicable); these should be single-spaced.
- No white extra white space between paragraphs (i.e., maintain double-spacing throughout).
- **Be sure to include both page numbers and line numbers to facilitate review.**

Referencing (adapted from PEN Style Guide posted to CourseLink)

Reference numbers in the text should be cited by using numbers in parenthesis at the end of the first sentence that refers to the material cited and should be before the period, such as (1). Do not use superscript. Multiple sequential referencing should be listed with the first and last number with a hyphen separating the two numbers e.g., (1-3).

How to Reference a Journal Article

French MR, Moore K, Vernace-Inserra F, Hawker GA. Factors that influence adherence to calcium recommendations. Can J Diet Pract Res. 2005 Spring;66(1):25-9.

- List all authors when six or fewer; when six or more, list only the first six and add "et al."
Example: Smith A, Jones B, Smith C, Jones D, Smith E, Jones F, et al.
- Abbreviate periodical titles according to Index Medicus. If a title does not appear in Index Medicus, provide the complete title.

Evaluation

Your work will be graded according to the criteria in the evaluation (p. 20-24). This is also the form that your peer reviewer will use to evaluate your SLR.

The SLR is worth a minimum of 20% of your final grade. Decide on your preferred weighting for the SLR and oral presentation by the beginning of class on Mon Oct 19.

FRAN*6610 – Systematic Lit Review/PEN Pathway – OUTLINE (5% of final grade; due Mon Oct 19)

Name: _____ Date: _____

1. Title of SLR/PEN Pathway clear and sufficiently descriptive.

1	2	3	4	5
(no)		(improvement required)		(yes)

2. Research question(s) is/are clearly written and in PICO format. *(For PEN Pathways only: the practice area – category and subcategory – are identified).*

1	2	3	4	5
(no)		(improvement required)		(yes)

3. Methods for searching, including databases and key search terms, are clear and comprehensive.

1	2	3	4	5
(no)		(improvement required)		(yes)

4. List of 15 to 20 key references is comprehensive, relevant and where possible, recent.

1	2	3	4	5
(no)		(improvement required)		(yes)

Comments:

Total: /20 = /5

FRAN*6610 Systematic Literature Review – EVALUATION

Adapted from *Canadian Journal of Public Health*, used to evaluate SLRs submitted for publication.

Author: _____

Reviewer: _____

Abstract

Abstract
= (x10)/20
= /10

1. Is the research question clearly stated?

1	2	3	4	5
(no)		(improvement required)		(yes)

2. Are the methods used clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

3. Are the major results clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

4. Are the main conclusions and recommendations clearly outlined?

1	2	3	4	5
(no)		(improvement required)		(yes)

Introduction/Background

Introduction
= (x10)/20
= /10

5. Are the background and context presented?

1	2	3	4	5
(no)		(improvement required)		(yes)

6. Is the research question clearly defined?

1	2	3	4	5
(no)		(improvement required)		(yes)

7. Is the stated research question relevant?

1	2	3	4	5
(no)		(improvement required)		(yes)

8. Are the key points of the studies (populations, interventions, outcomes) of the studies clearly identified?

1	2	3	4	5
(no)		(improvement required)		(yes)

Methods

Methods
= (x15)/20
= /15

9. Are the search strategies used to identify relevant articles described?

1	2	3	4	5
(no)		(improvement required)		(yes)

10. Are the databases searched presented?

1	2	3	4	5
(no)		(improvement required)		(yes)

11. Are key words listed?

1	2	3	4	5
(no)		(improvement required)		(yes)

12. Are the methods for including or excluding articles in the analysis described explicitly?

1	2	3	4	5
(no)		(improvement required)		(yes)

Results

Results
= (/15)

13. Are the results of the search described? (number of studies identified, number included, main reasons for exclusion)

1	2	3	4	5
(no)		(improvement required)		(yes)

14. Is the information from the included studies integrated systematically?

1	2	3	4	5
(no)		(improvement required)		(yes)

15. Are variations in the findings explained?

1	2	3	4	5
(no)		(improvement required)		(yes)

Discussion

Discussion
= (x20)/30
= /20

16. Is a summary of the key findings of the systematic review presented?

1	2	3	4	5
(no)		(improvement required)		(yes)

17. Are variations between studies discussed?

1	2	3	4	5
(no)		(improvement required)		(yes)

18. Are the effects of the variations on the final results discussed?

1	2	3	4	5
(no)		(improvement required)		(yes)

19. Are limitations presented?

1	2	3	4	5
(no)		(improvement required)		(yes)

20. Is the validity of the included studies assessed according to critical appraisal principles?

1	2	3	4	5
(no)		(improvement required)		(yes)

21. Are future directions for research indicated?

1	2	3	4	5
(no)		(improvement required)		(yes)

Conclusion

26. Is the conclusion supported by evidence in the article?

1	2	3	4	5
(no)		(improvement required)		(yes)

Conclusion
= (x5)/10
= /5

27. Is the quality of evidence considered in the conclusion?

1	2	3	4	5
(no)		(improvement required)		(yes)

References

27. Are the references appropriate in **number**?

1	2	3	4	5
(no)		(improvement required)		(yes)

References
= (x5)/15
= /5

28. Are the references appropriate in **quality**?

1	2	3	4	5
(no)		(improvement required)		(yes)

29. References (in text and in reference list) are cited appropriately.

1	2	3	4	5
(no)		(improvement required)		(yes)

General
considerations
= (x20)/5
= /20

General Considerations

30. Is the SLR well-presented and well-written (including spelling, grammar, sentence structure, punctuation, follows formatting guidelines specified in assignment description)?

1	2	3	4	5
(no)		(improvement required)		(yes)

Comments

Total = /100

FRAN*6610 - Evaluation of Peer Review of SLR/PEN Pathway (15% of final grade; due Mon Nov 30)

Reviewer (your name): _____

Reviewee (your classmate's name): _____

1. Was there sufficient feedback?

1	2	3	4	5
(no)		(improvement required)		(yes)

2. Was the feedback specific, including the what, why and how of the strengths and areas for improvement?

1	2	3	4	5
(no)		(improvement required)		(yes)

3. Were comments structured as a mix of questions, suggestions and "I statements"?

1	2	3	4	5
(no)		(improvement required)		(yes)

4. Was the feedback clear and easy to understand?

1	2	3	4	5
(no)		(improvement required)		(yes)

5. Was the feedback at the appropriate level (i.e., neither superficial nor 'nitpicky')?

1	2	3	4	5
(no)		(improvement required)		(yes)

6. Were the numerical scores consistent with the qualitative feedback?

1	2	3	4	5
(no)		(improvement required)		(yes)

7. Were the overall comments at the end of the evaluation comprehensive and constructive?

1	2	3	4	5
(no)		(improvement required)		(yes)

Overall comments:

/35 = /15

APPENDIX 3

Oral Presentation/Workshop

Your oral presentation can be delivered by any one of the methods listed below. Regardless of delivery method:

- The topic should relate in some way to your SLR/PEN topic.
- You can do the presentation independently or, provided your SLR/PEN topics overlap, with a partner.
- The presentation should be 30 to 40 minutes, including content delivery, learning activities, discussion, questions, etc.
- The presentation should follow the BOPPPS instructional method (see p. 29).
- You can, but need not, use PowerPoint. Instead, consider doing a ‘naked’ presentation. By ‘naked’ I mean without ppt, in the spirit of <http://www.amazon.ca/The-Naked-Presenter-Delivering-Presentations/dp/0321704452>
- If you *do* used PowerPoint, please:
 - **Email me your PPT by 8AM (at the latest) on the morning of your presentation**
 - Use font size 24 or larger. If you need to use a smaller font to fit all the information in, you have too much information. Cut back.
 - Avoid playing PowerPoint Karaoke – that is, avoid reading from your slides.
 - Include references on slides as you go, rather than present a reference list on a slide at the end
- “360° feedback” (optional). Your peers will evaluate your presentation using your choice of feedback forms (to be provided). I will use the evaluation on p. 30. Then, reflect – via email or in person with me – on all the feedback you receive.
 - Do you agree/disagree with the points raised?
 - What will you do the same/change in future presentations?

Delivery Methods – Choose One

Whatever your choice, make sure you let us know who we are as an audience.

Critique of an Original Research Article

Critical appraisal involves identifying strengths and limitations not just of the article itself, but importantly, the design of the study, and the science, on which the article is based. Keep this in mind as you critique each section of an article of your choosing - including the title, abstract, introduction, methods (participants, research design, methodology, data analysis), results, discussion, directions for future research, and conclusion.

Need help getting started? See “Evaluate the Text” in the following link:

<http://www.lib.uoguelph.ca/get-assistance/writing/specific-types-papers/using-scientific-journal-article-write-critical-review>

Please email your research article to the class one week ahead of time.

Delivery Methods – Choose One (cont'd)

Controversy/Debate

Is there a contentious issue associated with your topic? For example, some hospitals initiate post-operative oral or enteral nutrition in the absence of bowel sounds, whereas other hospitals wait for bowel sounds before initiating feeding. Present both sides of the debate and then include the class in a discussion of pros and cons. Take, and justify, a stand (i.e., choose a side).

Teach a Class to Dietitians New to this Area of Practice

If your topic is novel (e.g., FODMAP; eosinophilic esophagitis), pretend we are a group of dietitians new to this area of practice. You are the content expert here to tell us what we need to know to be involved in the care of patients in this population.

Teach a Class to Patients Newly Diagnosed With a Condition

Pretend we are patients who have been newly diagnosed with a condition, and who are attending a patient education session led by a registered dietitian. What is the condition? How does it affect our health? How should we monitor our condition? What do we need to know about our condition, from a nutrition perspective? What foods should we avoid/ consume? Where can we go for more information? Etc.

BOPPPS Instructional Method for Your Oral Presentation/Workshop

Adapted from Centre for Curriculum, Transfer and Technology. Instructional Skills Workshop Manual. Pat Pattison and Russell Day (Eds). Victoria BC; 2006

Bridge

- Introduction, the “hook,” why the topic is important
- Typically short
- Strategies include providing the reason for learning the topic; telling a story related in some way to the topic; referring something about the topic to the class’s experience; posing a question about the topic; offering an unusual fact or surprising statement

Objective

- Learning objective - what will the class “get out” of your presentation?

Pre-Test

- Find out what students know
- Allows the class to add their own experiences to improve participation and engagement
- Strategies include a short quiz; closed- and open-ended questions; brainstorming; gathering collective knowledge of the group around the topic.

Participatory Learning

- This is your main lesson or content delivery, and which incorporates participation and interaction (between you and students and/or between students)
- Try to encourage students to become actively involved in achieving the objective(s)
- Strategies include discussion, debate, problem-solving, reflection, application tasks, think-pair-share, case studies, scenarios, simulations, meal-planning, visioning, goal-setting, etc.
- *Note: these activities take more time than you might think. If you anticipate an activity taking 5 minutes, allow for 10 minutes to be on the safe side.*

Post-Test

- What did students learn? Were your desired learning objectives accomplished?
- Typically short
- Strategies for post-assessment: a short quiz; one minute-paper; performance or demonstration of a skill; problem-solving; analysis of a scenario

Summary

- Wrap up; summarize content.
- Create closure by relating back to the ideas covered in the Bridge
- Strategies include content review; asking class what they can do with, or how they can apply, the obtained knowledge; individual voice (quick roundtable for each person to have a ‘last word’); revisit the original learning objectives.

FRAN*6610 Oral Presentation - Evaluation

Presenter: _____ Date: _____

Content																									
1							7.5							15					22.5						30
Topic treated in some depth. Critical thinking demonstrated. Evidence of synthesis/integration. Evidence appropriately interpreted. Important points stressed. Interesting. Organized in a logical, coherent way. Appropriate amount of content for time allotted. Content well balanced with interactive activities.																									

Understanding																									
1							7.5							15					22.5						30
Understanding of topic is clear. Statements accurate. Knowledge of contextual factors demonstrated, including client/patient perspectives, and which may influence decision-making. Questions answered well.																									

BOPPPS Model				
1	2	3	4	5
Followed and well executed, including Bridge, Objective, Pre-test, Participatory Lesson, Post-test (i.e., assessing whether objective(s) met), Summary.				

Voice, Language and Mannerisms				
1	2	3	4	5
Spoke clearly and concisely. Appropriate tone of voice and body language. Voice not raised at end of sentences. No distracting mannerisms.				

Timing				
1	2	3	4	5
Completed in time allotted, at an appropriate and comfortable pace.				

Overall Style and Level of Presentation									
1	2	3	4	5	6	7	8	9	10
We knew who we were as an audience. Presentation appropriate for audience (professional, "pitched" at suitable level). Relaxed. Confident. Enthusiastic and engaged with audience. Maintained interest. Looked at entire audience. Recognized and responded appropriately to non-verbal communication. Minimal reading from notes. Visual aids, if used, effective in enhancing presentation and helping understanding.									

Comments:

TOTAL /85

APPENDIX 4

FRAN*6610 Reflection on Course Engagement (due Mon Dec 7 in Dropbox)

Name: _____

1. Describe your engagement – as you see it - in this course. Do you think you actively engaged? Why or why not?
2. Is your engagement in FRAN*6610 different than in other graduate courses you have taken, or are currently taking? Is it different than in undergraduate courses you took? Why or why not?

3. In your view, did you provide constructive and helpful feedback to your peers during the semester? This includes feedback on oral and written efforts.

4. What else do you feel should be considered in determining your engagement grade?

YOUR SELF-ASSIGNED GRADE FOR ENGAGEMENT _____ /15
[Your self-assigned grade will be taken into consideration]

APPENDIX 5 – Calling all MAN Students!

Dietetic Practice Competencies Met By FRAN*6610

(Per Partnership for Dietetic Education and Practice, 2013. www.pdep.ca)

Practice Competency	Performance Indicator	Learning Activity
<i>Professional Practice</i>		
Practice within limits of individual level of professional knowledge and skills.	1.04b Reflect upon and articulate individual level of professional knowledge and skills.	Written self-reflection on participation. Students provide peer review of classmates' written SLR/PEN® pathway. This peer review is assessed by the instructor.
Use a systematic approach to decision-making	1.06a Demonstrate knowledge of the role of ethics, evidence, contextual factors and client perspectives in decision-making	As part of the oral presentation, a student may choose to teach a class of patients diagnosed with a health condition
	1.06c Demonstrate knowledge of approaches to obtain and interpret evidence to inform decision-making	Students provide, and justify inclusion of, references in PEN pathway/SLR.
	1.06d Demonstrate knowledge of contextual factors that may influence decision-making	As part of the oral presentation, a student may choose to teach a class of patients diagnosed with a health condition
	1.06e Obtain and interpret evidence	Students complete an evidence-based oral presentation, and write an evidence-based PEN pathway/SLR
Maintain a client-centred focus	1.07c Determine client perspectives and needs.	As part of the oral presentation, a student may choose to teach a class of patients diagnosed with a health condition
Manage time and workload effectively	1.08b Prioritize professional activities and meet deadlines.	Demonstrated by meeting deadlines, and by adhering to time limits of oral presentation
Use technologies to support practice	1.09b Use technology to communicate.	Use of PowerPoint and on-line lit search tools (i.e., PubMed)
	1.09d Use technology to seek and manage information	Use of PowerPoint and on-line lit search tools (i.e., PubMed). Students are encouraged to use reference-managing software.
Assess and enhance approaches to dietetic practice	1.11a Demonstrate knowledge of the role of evidence, self-reflection, and consultation in assessing effectiveness of approaches to practice.	Students complete an evidence-based oral presentation, and write an evidence-based PEN pathway/SLR
	1.11e Seek new knowledge that may support or enhance practice activities.	Students complete an evidence-based oral presentation, and write an evidence-based PEN pathway/SLR
Participate in practice-based research	1.13b Identify research questions, methods, and ethical procedures related to dietetic practice.	Students complete an evidence-based oral presentation, and write an evidence-based PEN pathway/SLR

Practice Competency	Performance Indicator	Learning Activity
<i>Communication and Collaboration</i>		
Select appropriate communication approaches	2.01d Use appropriate communication technique(s).	Oral presentation using BOPPPS model where: B – Bridge O – Learning Objectives P – Pre-test P – Participatory Learning P – Post-test S - Summary
	2.01e Demonstrate knowledge of medical and dietetics-related terminology.	Students demonstrate this in their oral presentation and PEN pathway/SLR.
	2.01f Demonstrate knowledge of practice-setting-related terminology.	Students demonstrate this in their oral presentation and PEN pathway/SLR.
Use effective written communication skills	2.02c Edit written material for style, spelling and grammar. 2.02d Write clearly and concisely, in a manner responsive to the needs of the reader(s). 2.02e Write in an organized and logical fashion. 2.02f Provide accurate and relevant information in written material. 2.02g Ensure that written material facilitates communication.	SLR/PEN assignment.
Use effective oral communication skills	2.03b Speak clearly and concisely, in a manner responsive to the needs of the listener(s). 2.03d Use appropriate tone of voice and body language. 2.03e Recognize and respond appropriately to non-verbal communication.	Oral presentation.
Use effective interpersonal skills	2.04b Utilize active listening.	Interactions with peers throughout course. Engagement grade.
	2.04d Communicate in a respectful manner.	Demonstrated throughout course assessed as part of engagement grade.
	2.04n Seek, respond to and provide feedback.	Yes, if student engages in optional 360 degree feedback with instructor
Contribute to learning of others	2.05a Recognize opportunities to contribute to the learning of others.	By providing peer feedback on oral and written work

Practice Competency	Performance Indicator	Learning Activity
	2.05c Assess the prior knowledge and learning needs of others 2.05d Demonstrate knowledge of educational strategies relevant to practice, and their appropriate uses. 2.05e Select and implement appropriate educational strategies. 2.05f Demonstrate knowledge of learning resources, and their appropriate use in practice. 2.05g Select learning resources. 2.05i Develop learning resources. 2.05j Demonstrate knowledge of ways to establish and assess learning outcomes. 2.05k Establish and assess learning outcomes. 2.05m Deliver group educational sessions.	Students follow BOPPPS model when doing oral presentation.
Contribute productively to teamwork and collaborative processes.	2.06i Facilitate interactions and discussions among team members.	Part of engagement grade
Nutrition Care		
Assess nutrition-related risks and needs	3.01p Identify client learning needs related to food and nutrition.	As part of oral presentation, a student may choose to teach a class of patients diagnosed with a health condition
	3.01cc Identify chewing, swallowing and feeding problems.	One, 2-hour class on dysphagia assessment, with several practical activities

Practice Competency	Performance Indicator	Learning Activity
<i>Management</i>		
Manage programs and projects	5.02b Identify appropriate goals and objectives for a program or project. 5.02c Identify strategies to meet goals and objectives for a program or project. 5.02e Develop an action plan for a program or project.	Oral presentation using BOPPPS model.
	5.02n Provide training or education to staff or volunteers. 5.02r Contribute to staff or volunteer development or performance management activities.	If, as part of oral presentation, a student elects to teach peers as though they are RDs new to this area of practice
Manage food services	5.03b Identify the food service needs of a client group based upon their nutritional, cultural and physical characteristics.	Discussion of meal modifications for dysphagia.