



COLLEGE of SOCIAL AND APPLIED HUMAN SCIENCES

DEPARTMENT OF FAMILY RELATIONS
AND APPLIED NUTRITION

FRAN*6610 Advances in Clinical Nutrition COURSE OUTLINE – FALL 2021

1. GRADUATE CALENDAR DESCRIPTION

An advanced overview of clinical nutrition with emphasis on using the nutrition care process to integrate theory and practice in acute and non-acute care settings.

Credit Weight:	0.5 credits
Course Hours:	3-0 (36 lecture; 0 lab/seminar)
Pre-Requisite(s):	None
Co-Requisites(s):	None
Restriction(s):	For MAN and AHN graduate students only.

2. COURSE DESCRIPTION

This is an interactive, skills- and process-based course focused on integrating nutritional assessment and clinical nutrition as part of the nutrition care process and refining advanced critical thinking and communication skills via case studies and discussion.

3. TIMETABLE

Lecture:	Mondays, 9:00-11:20am (rise n' shine!). Although the official start time is 8:30am, we'll make 8:30-9:00am an informal, student drop-in time. Hard start time for class is 9:00am.
Location:	Alternative delivery – synchronous using Zoom, accessed via CourseLink. (If there are Zoom difficulties, we will switch to Virtual Classroom also accessed via CourseLink)

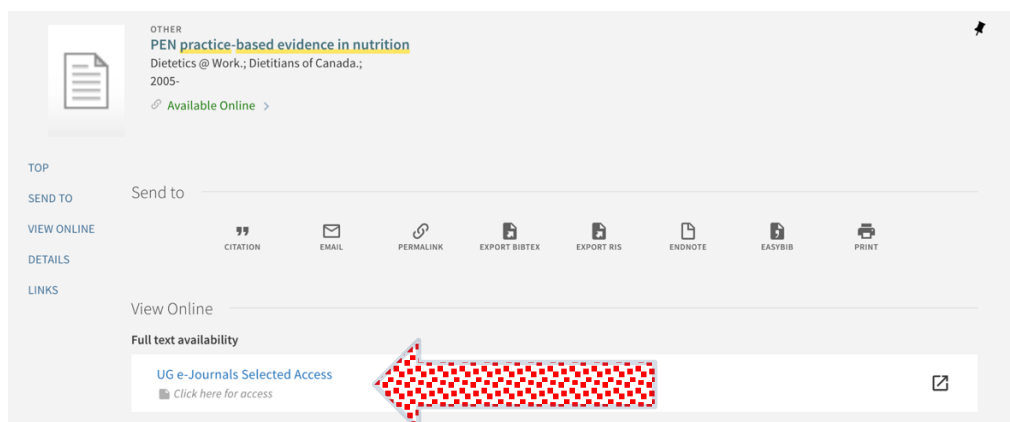
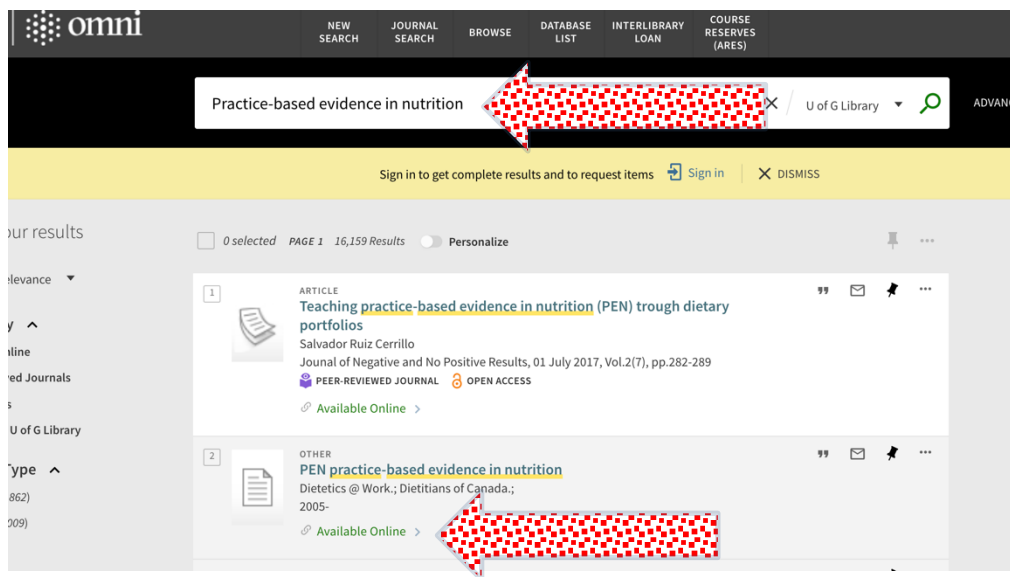
4. INSTRUCTIONAL SUPPORT

Course Instructor:	Andrea Buchholz, PhD, RD
Email:	abuchhol@uoguelph.ca
Telephone:	519-824-4120 ext. 52347
Office:	Macdonald Institute (MINS) room 235 – following public health guidelines related to COVID-19, I am not likely to be on campus much during F21
Office Hours:	Virtual office hours – please email me to make an appointment

5. LEARNING RESOURCES

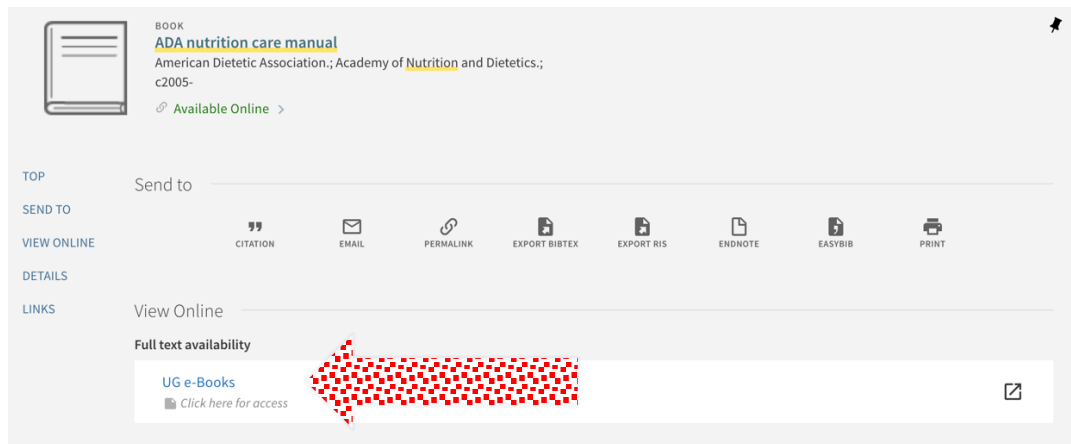
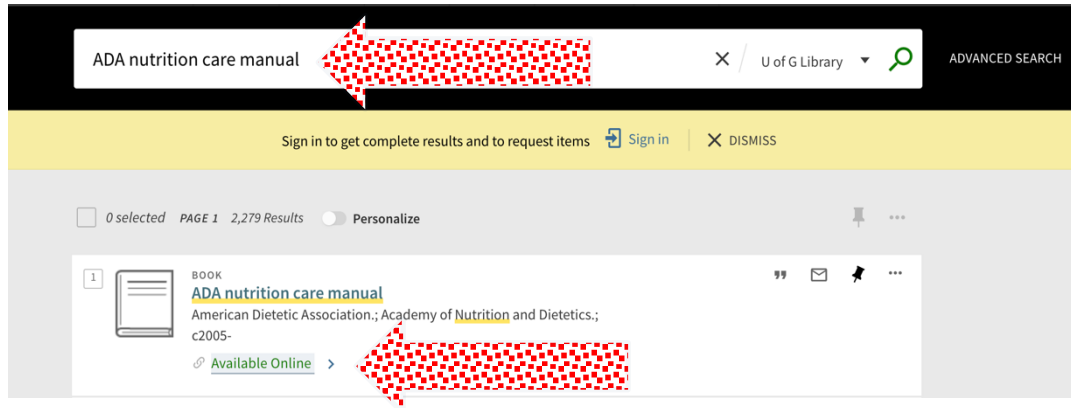
Required Resource(s):

- PEN® (Practice-Based Evidence in Nutrition). The PEN database is accessed through the university's library website. Here's how:
 - First, log in using your U of Guelph username and password
 - Click on the following link <https://www.lib.uoguelph.ca/>
 - In the Omni search field, enter "Practice-based evidence in nutrition"
 - Under "PEN practice-based evidence in nutrition," click on "Available Online" and then "UG e-Journals Selected Access."
 - See images below



Recommended Resource(s):

- Also available via Omni is the Academy of Nutrition and Dietetics (formerly American Dietetic Association) nutrition care manual.
 - In the Omni search field, enter “ADA nutrition care manual”
 - Click on “Available Online,” and then “UG e-Books”
 - See images below.
- Online pharmacological database: <http://www.nlm.nih.gov/medlineplus/druginformation.html>



6. LEARNING OUTCOMES

At the completion of the course, successful students will be able to:

1. Research and create an adapted PEN[®] (Practice-Based Evidence in Nutrition) Practice Question.
2. Create, present, and facilitate a clinical case study with a group of peers.
3. Apply critical thinking skills to work through the nutrition care process of peers' clinical case studies.

Performance Indicators met by successful completion of FRAN*6610 are presented in **Appendix**

C.

7. TEACHING AND LEARNING ACTIVITIES/CLASS SCHEDULE

Week	Topics (all classes to be held synchronously via Zoom accessed through CourseLink)	Readings/Due Dates
Sept 13	Welcome and course introduction	Course outline and appendices
Sept 20	Practice-Based Evidence in Nutrition (PEN®). Visit PEN website (see p. 2 for access info)	Appendix A of course outline, and sample PEN Practice Questions posted to CourseLink
Sept 27	PEN Practice Question – facilitated planning	
Oct 4	<ul style="list-style-type: none"> Nutrition care process – critical thinking using COVID case Team case study – how-to’s 	PEN search strategy due Fri Oct 8
Oct 18	<ul style="list-style-type: none"> Discussion - PEN search strategies Case study – facilitated planning in teams ADIME chart notes 	
Oct 25	Team 1 case study	Chart note for Team 1’s case due Sun Oct 31
Nov 1	Team 2 case study	Chart note for Team 2’s case due Sun Nov 7
Nov 8	Team 3 case study	Chart note for Team 3’s case due Sun Nov 14
Nov 15	Team 4 case study	Chart note for Team 4’s case due Sun Nov 21
Nov 22	Team 5 case study	Chart note for Team 5’s case due Sun Nov 28
Nov 29	Team 6 case study	Chart note for Team 6’s case and PEN Practice Question due Sun Dec 5

Note: Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the [COVID-19 website](#) and circulated by email.

If there are difficulties accessing Zoom, we will migrate to Virtual Classroom accessed via CourseLink).

8. ASSESSMENT DETAILS

Assessment	Associated Learning Outcomes	Due Date	% of Final Grade
PEN (individual or in pairs – your choice)			
Search strategy	1	Fri Oct 8	15%
Practice Question	1	Sun Dec 5	35%
Team case study (in teams of 4)	2, 3	Throughout	30%
ADIME chart note based any one or two teams' cases except your own team's case. (Individual)	3	Due the Sunday following team's presentation	20% (20% for one chart note, or 10% for each of two)
Total:			100%

9. COURSE STATEMENTS

Your Role

As with any course, you have the opportunity to be an active partner in your own learning. You will get out of Advances in Clinical Nutrition what you put into it. I have designed the learning outcomes, learning activities and course requirements to help facilitate your learning; whether you actually engage is up to you. I look forward to your active engagement, including contributing to class discussions and case studies. **That said, virtual learning is challenging. Take breaks as needed.**

My Role

As I see it, I'm here to help you help yourself learn. This includes creating a supportive and respectful virtual classroom culture conducive to active learning (complete with stress check-ins), facilitating class discussions with your engagement, and guiding your learning by posing and responding to questions, while also encouraging you to think critically and autonomously. **That said, virtual teaching is challenging. I will take breaks as needed.**

Course Website

There is a CourseLink website at <http://courselink.uoguelph.ca>. CourseLink will be used for accessing the Zoom virtual classroom, sharing announcements, submitting written work, posting grades and feedback, and for helpful resources including exemplars from previous students (PEN search strategy, PEN practice question, ADIME chart note). Got a question? Post it to the discussion board!

Recording of Lectures

By enrolling in a course, unless explicitly stated and brought forward to Andrea, it is assumed you agree to the possibility of being recorded during lecture, seminar or other "live" course activities, whether delivery is in-class or online/remote.

If you prefer not to be distinguishable during a recording, you may:

1. turn off your camera
2. mute your microphone
3. edit your name (e.g., initials only) upon entry to each session
4. use the chat function to pose questions.

Students who express to Andrea that they, or a reference to their name or person, do not wish to be recorded may discuss possible alternatives or accommodations with Andrea.

Late Assignments

Your responsibility is to complete the various course requirements on time. That said, life is busy, and it can be challenging to meet a deadline. With that in mind:

- There is a 48-hour grace period for submission of the PEN search strategy, PEN Practice Question, and ADIME chart note(s). No marks will be deducted if these assignments are submitted within 48 hours past the due date. **Please, do not treat the grace as the deadline, because it is not.** The deadline is a hard deadline and the grace period is in place to account for potential difficulties and life events that can occur. You do not need to email Andrea for late submissions during the grace period: just submit within the grace period. CourseLink will indicate that your assignment is late, but if it is within 48 hours past the hard deadline, it is not late. **No extensions beyond the grace period will be given.** Beyond the grace period, your assignment will incur a 10% per day late penalty, including weekend days, unless medical or other suitable documentation is provided. Assignments submitted more than 1 week after the grace period will receive a grade of zero (0). If you are going to submit an assignment after the grace period, contact Andrea to inform her when you will be submitting. This policy is in place to guarantee fairness for all students.
- Your team's case study day is indicated on the schedule on p. 4. If your team is unable to present as scheduled, it's your responsibility to find another team willing to switch dates with you. If you are absent on your team's case study day, the weighting of the case study will be transferred to your PEN Practice Question.

Resources – Writing

Did you know there is writing assistance available to you (for free!) at the University library? Click here for more info: <https://www.lib.uoguelph.ca/using-library/appointment-booking>

Receipt of Grades

After you receive a grade on CourseLink, please review your feedback. Any inquiry or dispute must be made within two weeks from the date posted. Thereafter, changes to the grade will not be considered.

Turnitin Software

Turnitin is integrated with the CourseLink Dropbox tool, to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph. All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that you will be able to educate and empower yourselves in preventing academic misconduct. You can screen your own assignments through Turnitin as many

times as you wish before the due date. You will be able to see reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

10. UNIVERSITY STATEMENTS

E-mail communication:

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When you cannot meet a course requirement:

When you find yourself unable to meet in-course requirements due to illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing with name, ID#, and email contact. [See the graduate calendar for information on regulations and procedures for Academic Consideration.](#)

Drop date:

Students have until the last day of classes to drop courses without academic penalty. The regulations and procedures for [Dropping Courses](#) are available in the Graduate Calendar.

Copies of out-of-class assignments:

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility:

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

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.

[The Academic Misconduct Policy is detailed in the Graduate Calendar.](#)

Recording of materials:

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources:

The [Academic Calendar](#) is the source of information about the University of Guelph's procedures, policies and regulations which apply to graduate programs.

Illness:

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g.. final exam or major assignment).

Safety Protocols:

For information on current safety protocols, follow these links: <https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/>
<https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

APPENDIX A – LEARNING ACTIVITIES

Practice-Based Evidence in Nutrition (PEN[®]) Practice Question – individual or in pairs (your choice)

Background

The PEN system 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 relevant to everyday practice. PEN 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**. In FRAN*6610 you will have the experience of a PEN author and will write an adapted Practice Question.

Visit [PEN Terminology and Features](#) to learn more about Practice Questions and more.

Complete this assignment individually or in pairs – your choice. If the latter, divide the work as you wish, however the expectation is that you will co-create the Practice Question, and review, edit and approve each other's contributions. You will share the same mark.

Topics

There are many possibilities! The only guideline is that the topic be clinical in nature. Ideas:

- Choose a Practice Question from a placement – ask your preceptor for suggestions.
- Revisit the curriculum from the MAN Boot Camp. Is there a clinical topic about which you would like to learn more? Now's your chance!
- If you are interested in **updating a Practice Question**, choose from the list posted to CourseLink, provided by Elizabeth Manafò, PEN Content Manager
- If you are interested in **creating a new Practice Question**
 - Visit PEN to confirm that the question has not already been published
 - OR
 - Review a current Knowledge Pathway based on an area of interest/placement/developing area of research. Is there a Practice Question within this Knowledge Pathway that you do not see and think should be included as part of evidence?

As a frame of reference, below is a sampling of topics from previous FRAN*6610 students:

- Does a low-FODMAP diet improve symptoms of Irritable Bowel Disease?
- Do post-operative, bariatric surgery patients who consume probiotics, compared to those who do not consume probiotics, have improved health outcomes?
- Do HIV+ individuals undergoing integrase strand transfer inhibitor treatment experience greater weight gain compared to those taking other HIV medications?
- Do breastfeeding women who take a fenugreek supplement or drink fenugreek tea have a higher breastmilk volume than those who do not?

An example PEN Search Strategy is posted to CourseLink.

PEN Search Strategy

Creating a PEN Practice Question requires excellent literature searching skills and appropriate bounding of the topic, so that the project is neither too small nor too large. To allow for feedforward (vs. feedback) early in the process, submit a single-spaced, **2-3 (max) page** search strategy with your and your partner's name (if applicable).

Include the following in your search strategy:

Title

Your Practice Question, in PICO format where possible.

PICO Format for Developing a PEN Practice Question (adapted from PEN Writer's Guide , 2019)	
P opulation - the relevant patients, clients or groups	<i>Do patients with ileostomies...</i>
I ntervention or exposure	<i>who consume a high fibre diet (>20 g)...</i>
C omparison or control	<i>compared to those who consume a low fibre diet (5-10 g)...</i>
O utcome (patient-, client- or group-relevant consequences of the intervention or exposure)	<i>have a higher incidence of ostomy blockage?</i>

Methods

Methods for literature searching, including databases, search terms with Boolean operators (AND, OR, NOT) and search filters/criteria. These should be clear and comprehensive. Google Scholar is not sufficient.

References for Possible Inclusion

A list of 3 to 5 English-language systematic literature reviews (SLR), meta-analyses, narrative literature reviews (only those with search strategies) and/or primary studies that answer your Practice Question and that you are considering including as evidence statements in your final PEN Practice Question assignment.

In order of preference, include:

- 1. High quality SLR or meta-analysis that matches your Practice Question.**
 - If your Practice Question is completely answered with one SLR/meta-analysis, then stop here. No need to look for further evidence.
 - If more than one SLR/meta-analysis is identified, choose the one that addresses all the important outcomes/best matches your Practice Question. If more than one SLR/meta-analysis addresses all the important outcomes/matches your Practice Question, select the one most recent and highest quality SLR/meta-analysis. Then stop here-no need to look further.
 - If your Practice Question is not completely answered, you'll need additional

evidence. For example, if the SLR/meta-analysis considers men, you may need an additional primary study on women (if this example fits with your Practice Question).

2. **Recent narrative review to summarize primary research.** The narrative review should include a search strategy and be balanced and objective.
 - If the review-with-search-strategy addresses your Practice Question and is the best quality evidence you can find, then stop there. No need to look for further evidence.
 - If the review-with-search-strategy does not address your Practice Question, you'll need additional evidence.
 - If the review-with-search-strategy is biased (i.e., it includes only those studies which prove the author's point/hypothesis), you'll need to replace this review with other evidence.

3. **High quality/impactful primary study(s)**, such as RCTs. Do so ONLY if:
 - It is more recent than the SLR/meta-analysis.
 - It reports an important outcome not included in the SLR/meta-analysis.

Do not include narrative literature reviews if they do not have a search strategy, opinion pieces, perspectives in practice, consensus statements, practice guidelines, “grey” literature, etc. **These cannot be made into evidence statements.**

References Identified Using Literature Search Strategy Which Will Be Excluded

A list of 3 to 5 English-language systematic literature reviews, meta-analyses, narrative literature reviews with search strategies or primary studies from your literature search strategy that you will exclude from your final PEN Practice Question assignment. For each, briefly explain (1 sentence) why you are excluding it.

Submission Instructions

- Include your and your partner's name (if applicable). If submitting as a pair, submit to one partner's Dropbox only.
- 2-3 (max) single-spaced pages in Times New Roman size 12 or Arial size 11 font; 2.5 cm margins, paginated.
- Follow PEN referencing style on p. 9-10 in the PEN Style Guide posted to CourseLink See rubric in Appendix B.

Can you deviate from the search strategy after submission? Yes.
If you are interested in a new direction, submit an alternate search strategy. The resubmission will not be graded.

PEN Practice Question

Brief description of what to include in your adapted PEN Practice Question assignment:

- An introduction and background
- A Practice Question with accompanying practice category and sub-category
- A Key Practice Point which answers your Practice Question
- Evidence
- Conclusion and recommendations for future research
- References

Expanded Description (see rubric in Appendix B)

Introduction and Background (~3-4 pages)

This includes background information about the condition/topic. It should be sufficiently descriptive to provide a practitioner new to the area of practice with the foundational information needed to understand the context of the Practice Question to follow. It can include definitions, prevalence, etiology, diagnosis, rationale for the Practice Question to follow, etc.

Practice Question, Category and Sub-Category (2-3 sentences)

Practice Question

A well-written background will set the stage for your Practice Question. Your Practice Question should follow (where possible) the PICO format.

Knowledge Pathway

Identify the Knowledge Pathway practice category to which your Practice Question belongs:

- *Population Health/Life Cycle*
- *Health Condition/Disease*
- *Food/Nutrients*
- *Professional Practice*

Practice Question Sub-Category

Identify the sub-category to which your Practice Question belongs:

- *Health Promotion/Prevention* – Questions relating to efficacy of health promotion or disease prevention activities or interventions; content may define or illustrate population health approaches including capacity building, social marketing, etc.
- *Assessment/Surveillance* – Questions relating to who should be assessed or screened, when, how, and why. Questions should be grounded in evidence and ideally tied to outcomes, not simply common or desirable practice.
- *Intervention* – Questions relating to effective program planning as well as nutrition interventions or therapy.
- *Evaluation/Outcome Indicators* – Questions relating to cost effectiveness, best practices, evaluation strategies, outcomes of interventions or validity of particular outcome measures.
- *Education* – Questions addressing effectiveness of specific types of education/counselling or education programming.

Key Practice Point (1-2 pages)

A key practice point (KPP) includes two elements:

Recommendation

A 1-3 sentence take-home message which directly answers your Practice Question. Think of the recommendation as the “so what?” factor. It should be valid (grounded in the evidence) and relevant (will make a difference to practice/outcomes and/or is one which practitioners/clients would care about).

Evidence Summary

A concise summary of each evidence point described in the Evidence section (below). Depending on the Practice Question, you are likely to need more than one evidence point. (See Example 1 Practice Question, KPP and Evidence, posted to CourseLink.) Each evidence point is accompanied by an evidence grade. Click [here](#) for the PEN evidence grading checklist.

Evidence (approx. 0.5-1 page per article)

The Evidence section is populated with evidence statements. Each evidence statement describes a single article in a concise and clear format. An evidence statement goes beyond paraphrasing the article abstract; it succinctly describes the study and results and puts these into context for the reader using your critical appraisal skills.

Setting Up Your Evidence Statements

Each lettered point is a separate article.

- Articles are ordered first by type (SLR/meta-analysis → narrative lit review with search strategy → primary study(s)), then publication date from newest to oldest

Each evidence statement should include the following information:

- Type and year of publication e.g., 2019 SLR, 2018 randomized controlled trial, etc.
- For a SLR, provide a brief description of the question addressed, number and type of articles and participants included (e.g., 12 RCTs (n=375 adults)), then the intervention/comparison and results.
- For primary studies, provide a brief description of the population (including drop-out rate, if applicable), intervention and results.
- When reporting results:
 - Only report those which are relevant to your Practice Question. If a SLR/study includes additional findings not relevant to your Question, don't report these.
 - Include quantitative findings such as odds ratio (OR), relative risk (RR), hazard ratio (HR), P-value etc., and Confidence Intervals (CI) where it makes sense to do so (i.e., when the question relates to risk)
 - When provided, report the degree of change/difference between groups or of association between two variables. This helps the reader determine clinical vs. statistical significance.
 - For example, a 5% decrease in LDL-cholesterol may be statistically significant ($p \leq 0.05$) but this isn't a terribly clinically significant decrease.

Alternatively, a 20% decrease in LDL-cholesterol levels may be statistically nonsignificant (i.e., $p > 0.05$), but one could argue that this decrease is pretty clinically significant.

- Article authors' main conclusions.
- Limitations of the study – both the authors' limitations as well as any limitations YOU identify. A transitional statement or phrase can help, e.g., “Limitations identified by the author of the study include.... and additional limitations are...”

How many evidence statements should you include?

It depends on your Practice Question. The typical range is 1 to 6.

Rather than focus on quantity, ask yourself:

Have I answered my Practice Question? Am I satisfied?

What's the Difference Between an Evidence Statement vs. Evidence Point vs. Evidence Summary?

An evidence statement is a description of the study and makes *evidence point(s)*.

Evidence points make up the *evidence summary*.

Conclusion and Recommendations for Future Research (~1 page)

The conclusion should include practical information helpful in understanding and applying the recommendation to practice. For example, consider access, any financial or human resource implications of your recommendation, etc. The conclusion should also provide suggestions for future research grounded in limitations identified in the evidence statement(s).

References (see p. 9 and 10 of the PEN Style Guide posted to CourseLink)

References to support your PEN Practice Question assignment will include those used to create the evidence statements, as well as a variety of other references to support the Introduction and Background, as well as the Conclusion and Recommendations for Future Research.

- Those references for the evidence statements will be SLR, meta-analyses, narrative literature reviews with search strategies, and/or high-quality primary study(s)
- Those to support the Intro and Conclusion sections can be broader and include narrative literature reviews, practice papers, “grey” literature, etc.
- All references should be presented in one reference list at the end of your assignment, in order of appearance in the text.
- 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

Howard MM, Nissenon PM, Meeks L, Rosario ER. Use of textured thin liquids in patients with dysphagia. *Am J Speech Lang Pathol*. 2018; 27(2):827–35. doi:10.1044/2018_AJSLP-16-0140. Abstract available from: https://pubs.asha.org/doi/abs/10.1044/2018_AJSLP-16-0140

- 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.

Note: if using PubMed, there is an easy way to copy references using the 'cite' function - choose NLM as the format, then copy and paste the reference into your Word document.

The screenshot shows the PubMed website interface. At the top, the NIH National Library of Medicine logo is visible. Below it, the search bar contains the query "cystic fibrosis) AND (dietary fat)". The search results page displays a citation for an observational study: "Pancreatic enzyme replacement therapy in cystic fibrosis: dose, variability and coefficient of fat absorption" by Joaquim Calvo-Lerma et al. (2017). The citation includes the journal name, volume, issue, pages, and DOI. To the right of the citation, there are several action buttons: "REEDes", "ACTIONS", "Cite", and "Favorites". The "Cite" button is circled in red. A "CITE" dialog box is open, showing the citation text and a "Format" dropdown menu with "NLM" selected. The "NLM" option is also circled in red.

PEN Practice Question Submission Instructions

- Include your and your partner's name (if applicable)
- 6-12 pages, paginated, double-spaced, 12 pt Times New Roman or 11 pt Arial font, 1" margins. The number of pages depends on how many evidence statements are included.
- The page limit excludes title page, references; these should be single-spaced.
- Do not include appendices. They will not be read.

Team Case Study – In teams of 4

Background

Your team will create a realistic clinical case study illustrating common nutrition concerns a clinician may encounter in the care of such a patient/client. The case study can be quantitative or qualitative, or some combination thereof. You can base your case study on a patient encountered in clinical practice; if you do, remove all identifying information. **The case should be sufficiently challenging to encourage *critical thinking* in working through the nutrition care process.**

A realistic case is one in which elements of the patient's presenting complaint(s), medical diagnosis, lab values, care plan, etc., make sense and are consistent with clinical practice.

An unrealistic case is one in which these elements would not likely be **seen in clinical practice**.
E.g., implausibly low serum albumin.

As a frame of reference, below are some case study topics from F19 and F20 students:

- 55 y.o. M with COPD admitted w/ diagnosis of UTI, T2DM
- 75 y.o. M admitted post autologous stem cell transplant secondary to multiple myeloma. Diagnosed with mucositis, odynophagia, and ulcerative colitis
- 18 y/o F with newly diagnosed Crohn's disease
- 62 y.o. M; 1/12 post-ischemic stroke. Diagnosed with dysphagia
- 4 mo old infant with suspected allergy to cow's milk protein
- 8 y o M with autism and nephrotic syndrome relapse

Note that FRAN*6710 (Practicum in AHN I) also has a case study assignment, with topics including chronic kidney disease + vegan diet, cancer (leukemia), Wernicke's, chylothorax and GSW with an open abdomen. If in FRAN*6610 you choose a topic similar to the list provided by Alexia Prescod in FRAN*6710, ensure that the cases are substantially different.

Overview

Via Zoom, your team will do a short oral presentation on the clinical condition and introduce the case to the class. In Zoom breakout rooms, each team member will then facilitate a small group discussion to work through the nutrition care process of the case. Following this, we will all return to the large group, where you and your team will debrief the case with the class.

Oral Presentation and Introduction of Case (~10-15 minutes)

The oral presentation should present the background of the condition. It should contain sufficient information to help your peers understand the condition and common nutrition issues to set the foundation for the case study.

- How the presentation (and the subsequent debrief) are divided amongst team members is up to you, however all should take part in the planning of both and the delivery of one or both.
- If you use PowerPoint:
 - “Share screen” from one team member’s computer so that the presentation is visible to all.
 - Use font size 24 or larger. If you need to use a smaller font to fit everything on a slide, you have too much information. Cut back.
 - Include references on slides as you go, rather than on a slide at the end.
- Either begin or conclude the presentation with the case study (a description of the patient).
- Email me your case study right before class starts. I will post to CourseLink for all to access and download.

Case Study Facilitation (~60 minutes)

In Zoom breakout rooms, each team member will facilitate a small group of 4 to 5 peers through the nutrition care process related to the case. This includes nutrition assessment, nutrition diagnosis (PES statement), nutrition intervention, and nutrition monitoring and evaluation.

By the following day (Tuesday at 11:59pm), submit to Dropbox a one-page, single-spaced self-reflection on your facilitation. See p. 22 for elements to include in your reflection.

Large Group Debrief, Discussion and Conclusion (~15-20 minutes)

Following case study facilitation, the team will lead a class debrief/discussion about the case, including but not limited to:

- Particularly relevant (not necessarily all) steps of the nutrition care process
- Challenges a clinician may encounter with such a case in real clinical practice
- Recommended resources for patients and/or clinicians
- Summary and overall conclusion

Exemplar chart notes - and medical abbreviation resources - are posted to CourseLink!

ADIME Chart Note – Done individually (on any one or two teams' cases except your own team's case)

Create a medical chart note, based on the nutrition care process of any one or two teams' case study (except your own team). One chart note submission will be worth 20% of your grade; two submissions will each be worth 10%.

The chart note is due on the Sunday following the team's case study presentation, at 11:59pm, in Dropbox.

Format

The medical chart note should be in ADIME format (Assessment, Diagnosis, Intervention and Monitoring/Evaluation):

- **Assessment:** Nutrition assessment
 - Interpret data needed to identify nutrition-related problems, their causes, and significance.
- **Diagnosis:** Nutrition diagnosis (PES statement)
 - Identify and describe a specific nutrition problem that can be resolved or improved through treatment/nutrition intervention.
 - Not be confused with a medical diagnosis (e.g., cirrhosis).
 - 2019 Nutrition Diagnostic Terminology is posted to CourseLink under Content
- **Intervention:** Nutrition intervention
 - Should resolve or improve the nutrition diagnosis/problem
 - Can include advice, education, delivery of a food component of a specific diet or meal plan, etc.
- **Monitoring/Evaluation:** Nutrition monitoring and evaluation
 - Monitoring, measuring, and evaluating the changes in nutrition care indicators, and whether the nutrition-related goals/expected outcomes are being met.

Submission Instructions

The ADIME chart note should:

- Be a maximum of 1 page, single-spaced, 1" margins
- In Times New Roman font size 12 or Arial size 11
- Be written in professional language including appropriate medical short forms and abbreviations where possible, SI units. There are medical abbreviation resources posted to CourseLink under "Content."
- Include your name in a header or footer

No references are required.

APPENDIX B - RUBRICS

PEN Search Strategy

Search Strategy - Methods

Methods for searching, including databases, key search terms (MeSH, text words), search criteria/filters, are clear and comprehensive.				
1	2	3	4	5

References for Possible Inclusion in PEN Practice Question Assignment

3 to 5 English-language references which are high quality and can be made into evidence statements (i.e., systematic literature reviews, meta-analyses, narrative literature reviews with search strategies, and/or primary studies).				
1	2	3	4	5

References to Exclude from PEN Practice Question Assignment

3 to 5 English-language references (i.e., systematic literature reviews, meta-analyses, narrative literature reviews with search strategies, and/or primary studies) you will exclude from your final Practice Question assignment. Brief justification for exclusion provided for each.									
1	2	3	4	5	6	7	8	9	10

Total: /20 = /15

PEN Practice Question

Introduction/Background

The background is sufficiently descriptive to provide a practitioner new to the area with the foundational information needed to understand the context and relevance of the Practice Question to follow.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Practice Question, Knowledge Pathway Category and Sub-Category

Practice Question in PICO format (where possible) and positioned in appropriate practice category and sub-category.				
1	2	3	4	5

Key Practice Point - Recommendation

Directly and succinctly answers the Practice Question. A clear practice recommendation is made. The recommendation is valid (grounded in the evidence presented) and relevant (will make a difference to practice/outcomes and/or is one which practitioners/clients would care about).									
1	2	3	4	5	6	7	8	9	10

Key Practice Point – Evidence Summary

Summary of each evidence point is concise, accurately reflects the evidence statement and is accompanied by an evidence grade consistent with the quality of evidence supporting the point.									
1	2	3	4	5	6	7	8	9	10

Evidence

Each evidence statement is clearly and succinctly explained and goes beyond a simple description or paraphrase of the article abstract. The study and results are contextualized for the reader, demonstrating excellent critical thinking and interpretative skills. Elements presented on p. 13-14 of the course outline are included. The author has skillfully identified one or more evidence points as needed to answer the Practice Question. Evidence statements (if more than one) are in the correct order.																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Conclusion and Recommendations for Future Research

Provides practical and helpful information to understand and apply the recommendation to practice. (e.g., considers access, practicality/cost, etc.). Recommendations for future research are grounded in limitations identified in the evidence statement(s).																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Overall Considerations and References

The assignment is well-written. This includes flow and clarity of points, spelling, grammar, sentence structure, punctuation. Follows submission instructions. References are appropriate in number and quality, and are cited per PEN Style Guide, both in the text and the reference list.																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

TOTAL /100 = /35

Team Case Study

Shared Marks

Background Presentation

Content – quality, quantity, organization of information; provides solid foundation for case study									
1	2	3	4	5	6	7	8	9	10

Case Study

Realistic and sufficiently challenging to get peers to critically think through the nutrition care process; illustrates one or more challenges a RD may encounter in managing such a patient in real life; well written; clearly presented; uses medical charting terminology/short forms																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Group Debrief, Discussion and Conclusion

Facilitators solicit contributions from peers re: relevant steps of the nutrition care process, review “sticking points,” discuss challenges faced by RD and/or patient in scenario, keep discussion flowing and advancing, recommend resources, provide overall summary and “take away” message(s)									
1	2	3	4	5	6	7	8	9	10

Overall

Flow, Timing and Teamwork – presentation, group debrief and discussion flow well; team manages time well without rushing or going too slowly; team works well together; tasks appear equitably divided									
1	2	3	4	5	6	7	8	9	10

Individual Marks

Delivery

Presenter/discussant relaxed, confident, engaging, interested/non-monotone, professional. Minimal reading from notes/slides.									
1	2	3	4	5	6	7	8	9	10

Reflection on Case Facilitation

Facilitator provides an honest and substantiated reflection of their facilitation performance, identifying and explaining reasons why one or more elements of the facilitation went well/did not go well. Illustrative examples provided.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

TOTAL	/75 =	/30
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Case Study Facilitation – Reflection

This should be an honest reflection of your facilitation skills. What is being graded is the quality of your reflection rather than your actual facilitation performance. Use your peers' comments to inform your reflection. If you and/or your peers felt your facilitation skills were weak, explain here how/why. If the reflection on the facilitation performance is strong, there is still the opportunity for full marks.

Guidance

How skillfully did I guide the group discussion? Did I ask the group questions to keep the discussion moving?
Did I redirect, rather than answer, questions posed by peers?

Comments:

Group Dynamics

Did I engage all members of the group, including drawing in those who are quieter and redirecting those who were more dominant? Did I encourage my peers to work together?

Comments:

Flow, Time Management

How did I manage time? How did I manage the flow from section to section of the nutrition care process?

Comments:

ADIME Chart Note

Assessment

Interpret data needed to identify nutrition-related problems, their causes, and significance.				
1	2	3	4	5

Diagnosis(es)

Create as many nutrition diagnoses as are relevant to the patient, based on the nutritional assessment. PES statement(s) is(are) clearly written, well justified, based on information presented in the case.				
1	2	3	4	5

Intervention

Proposed intervention(s) based on the PES statement(s). Consistent with (resolves or improves) the nutrition diagnosis.				
1	2	3	4	5

Monitoring and Evaluation

The plan monitors, measures, and evaluates the changes in nutrition care indicators, and whether the nutrition-related goals/expected outcomes are being met. Consistent with nutrition diagnosis and intervention.				
1	2	3	4	5

Charting and Writing

Clear, well-written, professional including appropriate use of medical terminology and short forms/abbreviations, excellent spelling and grammar. Consistent with ADIME charting and submission instructions.									
1	2	3	4	5	6	7	8	9	10

Total	/30 =	/20 for one submission, /10 for each of two submissions
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APPENDIX C – Dietetic Performance Indicators Incorporated Into FRAN*6610

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

Practice Competency	Performance Indicator	Learning Activity
<i>Professional Practice</i>		
Use a systematic approach to decision-making	1.06e Obtain and interpret evidence	<ul style="list-style-type: none"> • PEN Practice Question and search strategy. • Students work through the nutrition care process several times throughout the course (when they develop their own cases, but also when working through peers' case studies)
Maintain a client-centred focus	1.07c Determine client perspectives and needs. 1.07d Integrate client perspectives and needs into practice activities. 1.07e Identify services and resources relevant to client needs.	<ul style="list-style-type: none"> • Students determine client perspectives and needs when working through their team's case study. • Students also recommend resources for their case study during the large group debrief/discussion
Manage time and workload effectively	1.08b Prioritize professional activities and meet deadlines.	Demonstrated by meeting deadlines, and by adhering to time limits for case study presentation
Use technologies to support practice	1.09b Use technology to communicate.	Use of PowerPoint for case study presentation. Email class/instructor. Use of Zoom to attend and engage in class.
	1.09d Use technology to seek and manage information	Use of PowerPoint and on-line literature-searching tools (i.e., PubMed, PEN, etc.).
Assess and enhance approaches to dietetic practice	1.11c Assess effectiveness of practice activities.	When working through the nutrition care process of cases throughout the semester, students must identify a nutrition monitoring and evaluation plan.
	1.11e Seek new knowledge that may support or enhance practice activities.	<ul style="list-style-type: none"> • PEN Practice Question. • In designing their case studies, students seek new knowledge.
Participate in practice-based research	1.13b Identify research questions, methods, and ethical procedures related to dietetic practice.	Students develop an evidence-based PEN Practice Question
	1.13c Source, critically appraise and interpret literature relevant to a research question.	
	1.13d Summarize and communicate research information.	

Practice Competency	Performance Indicator	Learning Activity
<i>Communication and Collaboration</i>		
Select appropriate communication approaches	2.01d Use appropriate communication technique(s). 2.01e Demonstrate knowledge of medical and dietetics-related terminology. 2.01f Demonstrate knowledge of practice-setting-related terminology. 2.01g Use appropriate terminology.	Case study presentation, PEN Practice Question, ADIME chart note
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.	PEN Practice Question, case study description, ADIME chart note
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.	Case study presentation, facilitation
Use effective interpersonal skills	2.04b Utilize active listening. 2.04d Communicate in a respectful manner.	Case study facilitation. Demonstrated throughout course, including case study facilitation
Contribute to learning of others	2.05a Recognize opportunities to contribute to the learning of others. 2.05e Select and implement appropriate educational strategies. 2.05g Select learning resources. 2.05m Deliver group educational sessions.	Case study facilitation. <ul style="list-style-type: none"> As part of the case study presentation, students research and select recommended resources for RDs working with a particular population ADIME chart note, which includes recommendation for patient educational strategies and/or learning resources
Contribute productively to teamwork and collaborative processes.	2.06c Contribute dietetics knowledge in collaborative practice. 2.06g Contribute to shared decision making. 2.06i Facilitate interactions and discussions among team members.	Case study presentation, facilitation and large group debrief and discussion

Practice Competency	Performance Indicator	Learning Activity
<i>Nutrition Care</i>		
Assess nutrition-related risks and needs	<p>3.01b Use appropriate nutrition risk screening strategies.</p> <p>3.01d Identify relevant assessment data to collect.</p> <p>3.01f Obtain perspective of client, family or relevant others.</p> <p>3.01i Obtain and interpret medical history.</p> <p>3.01l Obtain and interpret demographic, psychosocial and health behaviour history.</p> <p>3.01n Obtain and interpret food and nutrient intake data.</p> <p>3.01p Identify client learning needs related to food and nutrition.</p> <p>3.01r Obtain and interpret anthropometric data.</p> <p>3.01u Obtain and interpret biochemical data and results from medical tests and Procedures</p> <p>3.01ff Determine client nutritional requirements.</p> <p>3.01hh Integrate assessment findings to Identify nutrition problem(s).</p>	<ul style="list-style-type: none"> As part of case studies, students work through the nutrition care process, including nutrition assessment. In completing the ADIME chart note, students assess a patient’s nutritional status.
Develop nutrition care plans	<p>3.02b Prioritize nutrition care goals based upon risk and available resources.</p> <p>3.02d Select appropriate nutrition interventions.</p> <p>3.02f Select appropriate textural and therapeutic diet modifications.</p> <p>3.02h Develop or modify meal plans.</p> <p>3.02j Determine supplementation needs.</p> <p>3.02t Develop client support plan</p> <p>3.02v Develop client education plan.</p> <p>3.02x Select strategies to monitor and assess nutrition care plan outcomes</p>	<ul style="list-style-type: none"> As part of case studies, students work through the nutrition care process, including planning the nutrition intervention. In completing the ADIME chart note, students develop a nutrition intervention

Practice Competency	Performance Indicator	Learning Activity
<i>Nutrition Care (cont'd)</i>		
Manage implementation of nutrition care plans.	3.03d Identify strategies to communicate nutrition care plan with client, interprofessional team and relevant others.	As part of case studies and the ADIME chart note, students develop a nutrition intervention (which for some cases will include strategies to communicate the nutrition care plan with various stakeholders)
Evaluate and modify nutrition care plan as appropriate.	3.04b Identify factors impacting the achievement of outcomes.	As part of case studies and ADIME chart note, students develop a plan for nutrition monitoring and evaluation
<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.	PEN search strategy
	5.02n Provide training or education to staff or volunteers. 5.02r Contribute to staff or volunteer development or performance management activities.	Case study presentation, facilitation