UNIVERSITY OF ALBERTA

FACULTY OF NURSING

UNIVERSITY OF ALBERTA

COLLABORATIVE BACCALAUREATE

NURSING PROGRAM

Keyano College

Grande Prairie Regional College
Red Deer College
University of Alberta

NURSING 211A

Statistics & Knowledge Management

COURSE SYLLABUS

(2nd Year BScN)

September 8th to October 20th, 2020

"Do not go where the path may lead, go instead

where there is no path, and leave a trail"

Ralph Waldo Emerson

Revised August 2020

Contents

Calendar statement

NURS 211 - Statistics & Knowledge Management (3 credits)

An introduction to reading, understanding, and interpreting commonly used statistics in published health sciences research. The course provides a hands-on approach to understanding measurement, sampling, and statistical analysis techniques commonly used in healthcare research. It introduces the concepts of information literacy, health data and big data in electronic datasets and the statistical techniques used to interpret these data in meaningful ways.

Credit may be obtained for only one of NURS 211 or 341.

Course hours (for this term)

Lecture: 6 hrs/week for 7 weeks   Seminar: 0   Lab: 0

Course objectives

Upon completion of this course, the student will be able to:

1.   Identify and explain levels of measurement.

2.   Identify and explain descriptive statistics (measures of central tendency, measures of dispersion).

3.   Identify and explain null and alternative hypotheses, and hypothesis testing.

4.   Explain the concepts of reliability and validity in relation to measurement tools

5.   Interpret results of parametric and non-parametric tests

6.   Interpret statistical results presented in graphs and tables, including meta-analysis tables

7.   Apply sampling and probability theories to the interpretation of health-related research

8.   Describe ways in which statistics can be used to inform clinical judgement

9.   Discuss the ways in which statistics help to build evidence that can be used to inform clinical judgement.

Course Instructor

Arlene Starkes, Bsc, BNRN, MN
780-791-4961
arlene.starkes@keyano.ca

Office Hours:
Mondays 1300 to 1500
Office S186C

Note:
- Please allow 2 business days for a response. Include your course name in your subject line.
- Professional and respectful communication is expected. Please refer to email etiquette.

Level of Independence

(There is an expected progression within a course and between levels):

Students are responsible to familiarize themselves with Graduate Competencies and Year-End Outcomes (with Cross Reference to Courses). Attention must be given to the competencies in column "Level 2, Junior 2".

Required Textbooks

(Note: Foundations textbooks will be used as references throughout the program. Please retain your copies as they will be required resources in future courses).

LoBiondo-Wood, G., Haber, J., Cameron, C., & Singh, M.D. (Eds.). (2018). *Nursing research in Canada: Methods, critical appraisal and utilization for evidence-based practice (4th ed.).* Toronto, ON: Elsevier Canada.

LoBiondo-Wood, G., Haber, J., & Samuels-Dennis, J. (Eds.). (2018). *Study guide: Nursing research in Canada: Methods, critical appraisal and utilization for evidence-based practice. (4th ed.).* Toronto, ON: Elsevier Canada.

Course Evaluation

Assignments/Course components	Dates	Weight	Course objectives no.
1) Quizzes (5)	Sept 22, Sept 24, Sept 29, Oct 6, Oct 15	1% each, mark based on highest 4 for a total of 4%	1-9
2) Assignments (2)	Assignment 1: Sept 8 - 29 DUE: Sept 29th Assignment 2: Sept 29 - Oct 20 DUE: Oct 20th	Assignment 1 - 5% Assignment 2 - 6%	Assignment 1: obj 1-4 Assignment 2: obj 5-7
3) Midterm	October 8th	40%	1-4
4) Final	Final Exam Week TBD	45%	5-9

Please refer to the Absence Statement as stated in the Keyano College BScN Student Handbook 2020-2021.

Note: All methods of evaluation must be completed and submitted for grading in order to pass Nursing 388.

Evaluative Component Descriptions

1) **Quizzes**:

   Each quiz will be open-book and will include 10 multiple choice questions using a Readiness Assessment Testing (RAT) format (an initial 10-minute attempt, followed by group discussion of 10 minutes and a second 10-minute attempt, with the grade as an average of 2 attempts). Students must be present in class to write the quiz. Students absent for the quiz will be given a score of 0 for that quiz. The final mark for the quiz component of the course will be based on the best four out of five quiz scores.

2) **Assignments:**
   Each assignment will include 30 multiple choice questions that focus on application of course material.

3) **Midterm Exam:**

The mid term exam will cover material from Units 1-4

4) **Final Exam:**
The final exam will cover material from Units 5-7

Final grades

The assignments are marked as raw scores according to the percentage weight assigned to each. The marks on course assignments will contribute to the overall letter grade according to the percentage that each assignment is weighted in the course. At the end of the course, all assignment scores are totaled for a term summary mark in the course based on the grading scale below. The FINAL COURSE GRADE is based on the cumulative total of individual student's weighted assignment marks. **Final Course Grades will be awarded according to the Keyano College Four-Point Grading Scale.**

Keyano College Percentage-Alpha Grading System

Descriptor	Percentage Scale	Alpha Scale	GPA
Excellent	96-100	A+	4.0
	90-95	A	4.0
	85-89	A-	3.7
Good	80-84	B+	3.3
	76-79	B	3.0
	72-75	B-	2.7
Satisfactory	68-71	C+	2.3
	64-67	C	2.0
Minimum Pass	60-63	C-	1.7
Poor	55-59	D+	1.3
	50-54	D	1.0
Failure	0-49	F	0.0

Progression Policy:

A passing grade of C- for non foundation courses and an overall yearly GPA of 2.0 is required for all students to progress.

Nursing Program Policies

Keyano College is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the College in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behavior and avoid any behavior which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the College.

Students must be familiar with all Nursing Program Policies. Refer to the Keyano College Nursing Program: Student Handbook for Specific Nursing Program policies and to the Keyano College Credit Calendar for general college policies.

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College Credit Calendar. The Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

Please refer to the Student Handbook and review the Student Code of Conduct Policy (Policy 110.0), Student Rights Policy (Policy 111.0) and Student Code of Conduct Procedure (110.1). It is expected that you will review and be aware of expectations relative to student rights, responsibilities, and behavior.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and notes that may be due.

Academic Misconduct

Students are responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's own.
- The use of unauthorized aids in assignments or examinations (cheating).
- Collusion or the unauthorized collaboration with others in preparing work.
- The deliberate misrepresentation of qualifications.
- The willful distortion of results or data.
- Substitution in an examination by another person.
- Handing in the same unchanged work as submitted for another assignment; and
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each

student to be aware of the guidelines outlined in the Student Rights and Code of Conduct
Policies.

Cheating and Plagiarism

All students must complete the Plagiarism/Tutorial Certificate found on Moodle. To locate this
information, sign into Moodle and on the left side of the page under student the tutorial can be
located.

Expectations:
1. All students must complete this tutorial. The certificate must be shown to the instructor
   prior to submitting any written assignment. Failure to show the instructor the certificate
   of completion could result in a late written assignment penalty.
2. If you have completed this tutorial in a University Studies course you can show your
   instructor, the certificate. The tutorial is required to be completed only once during your
   time at Keyano unless you have left the program and returned.
3. All work must be original in this course. Cutting and pasting from work done in a
   previous course is considered cheating/plagiarism.

Late Assignments

All assignments are to be submitted as indicated in the syllabus and timetable. Extensions on
assignments may be granted; however, must be negotiated with the instructor prior to the due
date and with a date specified for late submissions. Assignments not submitted on the day and
time specified will incur a 5% deduction per day including weekends. This will be applied each
day until the assignment is received by the instructor. Students can submit assignments by e-mail
on weekends.

Examinations

Please consult [Keyano College Credit Calendar](#) for the policy statements on examinations.
Please note that examinations begin and end at a scheduled time. Students who arrive late for

face to face exams will not be allowed to write the exam if students have already completed the exam and have left the room. Students will not be allowed to leave the classroom during the writing of exams without the permission of the tutor. Students are to leave all jackets, purses, books, bags, eyeglass cases, pencil cases or similar items in their lockers. Any of these items brought to the examination are to be left at the front of the classroom. Students are not allowed to have food or drink in the classroom during exams.

Expectations of Students Writing On-Line Exams

1. Students are responsible for accessing the exam from a location and computer of their choice. The student is responsible for discussing any computer/internet issues with the Instructor at least two days prior to the exam date listed on the course timetable.
2. Quizzes and exams are not open book exams (unless specified). The quiz or exam is to have been studied for prior to the quiz/exam date and is to be completed independently; that is by oneself, not in collaboration with or company of another person or persons. No photos of quiz/exam questions are to be taken via phones.
3. Once the quiz/exam has started, the student will submit their answers immediately before going on to the next question. The student will not be able review/change answers.
4. Students must ensure they have a reliable internet connection.
5. If students are writing from outside Fort McMurray, or in another province, it is the students' responsibility to ensure the time change is adhered to. That is if the exam is to start at 0900 hours Alberta time and is being written in Ontario, then the time to begin the exam is at 1100 hours Ontario time. It is **strongly recommended** that students write within Alberta as Moodle may not be supported outside of the province. Students must seek permission from instructor if writing a quiz/exam outside of the province.
6. Time for online quizzes/exams will be strictly adhered to. For example, if a quiz is for thirty minutes it will be open for exactly thirty minutes. The instructor will let the student know the exact time of the quiz/exam. Fourth year students will have access to the NCLEX prep exam for 60-90 minutes after the exam closes in order to review the rationale for questions answered incorrectly.

7. No grades will be released until the instructor has had time to review the quiz/exam stats. Once the review has been done, the marks will be released. Review of quiz/exam questions in class, will be done at the instructors' discretion.

8. If any issue arises during the taking of the quiz/exam, the student is to contact the instructor immediately at the time of the issue.

9. It is the responsibility of each student to be familiar with the contents of the Student Code of Conduct, signed in first year and available on Moodle for students to review.

Using LockDown Browser for Online Exams

This course requires the use of LockDown Browser for online exams.

(1) Watch this short video to get a basic understanding of LockDown Browser and the optional webcam feature (which may be required for some exams).

(2) Then download and install LockDown Browser from this link:
https://ilearn.keyano.ca/course/view.php?id=28874#section-7

To take an online test, start LockDown Browser and navigate to the exam. (You will not be able to access the exam with a standard web browser.) For additional details on using LockDown Browser, review this Student Quick Start Guide (PDF) on Moodle.

Finally, when taking an online exam, follow these guidelines:

- Select a location where you will not be interrupted
- Before starting the test, know how much time is available for it, and that you have allotted sufficient time to complete it
- Turn off all mobile devices, phones, etc. and do not have them within reach
- Clear your area of all external materials — books, papers, other computers, or devices
- Remain at your desk or workstation for the duration of the test
- LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Specialized Supports

The Student Services department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano College. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented differently this semester by being provided mostly virtually. In-person service can be requested as needed. All Alberta Health Services guidelines will be followed for in-person appointments — wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30.
The Library has evening and weekend hours. Please check keyano.ca/library for current hours.

Accessibility Services: provides accommodations for students with disabilities. Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility services supports and to book a virtual appointment, please contact accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Academic Success Coaching: offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano.

Academic.success@keyano.ca is the best way to access resources during virtual service delivery.

Wellness Services: offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. All individual appointments will continue virtually.

Wellness Services welcomes students to participate in any of the virtual group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual virtual appointments can be made by emailing wellness.services@keyano.ca.

Library Services: provides students with research and information supports as they engage in their studies. Library staff are available to support you both virtually and in person during the fall semester. For library service supports and inquiries, please email askthelibrary@keyano.ca.

Individual support with the Information Librarian will be provided virtually. Appointments can be requested by email or by placing a Book a Librarian request using the online form found here.

Research and Subject Guides are helpful resources when conducting research or addressing your information needs. To view a subject or course specific guide, use the following Subject Guides link
To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the Research Help Library page.

Skill Centre: provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, writing support groups, facilitated study groups,

workshops and study space. Tutoring services are **free** to Keyano students. Tutoring is available for Math, Writing, English, and Science subject areas.

While most courses are being offered online, the Skill Center will be offering mostly virtual tutoring services and in-person sessions as requested. Please email Skill.centre@keyano.ca to get in contact with our tutoring staff.

For the most up to date information on how to book a tutoring session, please view the Keyano Skill Centre homepage.

E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important.

Here is a list of recommended system requirements for Fall 2020:

Specific department requirements:
Business and OA programs require Windows 10.
Other programs may utilize Windows based tools as well.

Computer Software
Students will be able to get access to Microsoft Office 365 for Free using Keyano Credentials by clicking here

Internet Speed

Minimum Internet speeds of 5 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home). Check your internet speed with Fast.com.

System requirements:

Microsoft Windows	Apple
Minimum Requirements: A Windows 10 **computer/laptop** · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software	**Minimum Requirements:** A Macintosh (V10.14 and above) **computer/laptop** · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software.
Recommended Requirements · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.	**Recommended Requirements** · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.
Chromebooks are **not** recommended as they are not compatible with testing lockdown browsers. A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.	

Recording of lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not publish any of the lectures or lecture materials, this includes any

recordings, slides, or instructor notes on any platform. Thus, no student can publish or sell instructor notes without formal written permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.