



NZ Certificate in Study and Career Preparation (Level 4)

Nursing Maths

FSTU 3913

Course Guide

Semester 2 2020



Welcome to Nursing Maths FSTU 3913

Haere mai, Talofa lava, Malo e lelei, Bula

Helpful Information

Ask Questions

- If you are unsure about anything, please ask your tutor. We love questions! There is no such thing as a silly question
- There is an **ASKme desk** in 510 at Student Central, and 520 (Library) L 3 where you can get help to use any of our services at Unitec.

Cell phones

- Keep phones on silent and not on your desk. Research is showing that distraction from cell phones is a huge reason for learner under achievement.
- Do not spend time on them during class unless instructed to do so.



Communication

- If you cannot make it to class or if you are going to be late for any reason, please email your tutor.
- If you miss a class, **you will need to** catch up. Please see your classmates first to see what was covered in class and what tasks you need to complete in your own time, or ask your tutor. Additional help is also available from a Learning Advisor and from the course Moodle site. **You will need to** catch up to be successful.

Parking

- The parking building at Henderson Library/Unitec campus (14 Trading Place, Henderson) has \$3.00 all day parking for students who show an ID card. You need to be early, as the carpark can fill up. Pay and display carparks and free carparks are also available nearby. The carparks are closely monitored and cars will be clamped and/or towed.
- Using public transport and/or cycling is encouraged.



Free Shuttle and Public Transport

- Links for information on getting yourself to Unitec
 - free Unitec shuttle services at <https://www.unitec.ac.nz/current-students/on-campus/shuttle-bus>
 - Plan your travel on public transport at <https://at.govt.nz/bus-train-ferry/>
 - Remember to get an **Auckland Transport "AT Tertiary ID sticker"** attached to your ID card and **follow the steps on the AT website to get discounted** fares with a HOP card.



Smoking

- We are a non-smoking campus. If you choose to smoke, you must go off site.



Security

- **Always take your phone, money and any other valuables with you when you leave the classroom. Unitec Security can be contacted on 0800 10 95 90**

Studylink & Fees Free Support Sessions

Support with completing Fees Free applications or Studylink applications is available through Student Support by attending the drop-in sessions (session times available from the AskMe desk or your lecturer) or by making an appointment by emailing studentsupport@unitec.ac.nz

Nursing Maths FSTU 3913

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Course Aim

This course is designed to extend students' confidence and understanding of mathematics used in nursing contexts and to use mathematical thinking without a calculator in the solving and communication of contextualised problems.

Course Learning Outcomes:

1. Demonstrate mathematical thinking with proportional reasoning and apply strategies to solve mathematical problems including drug calculations.
2. Use appropriate mathematical language and conventions to communicate mathematical ideas in a variety of ways.
3. Develop strategies to manage own learning to achieve successful outcomes in individual and group tasks.
4. Develop strategies to manage own learning to achieve successful outcomes in individual and group tasks

Course schedule

**View this page in the Nursing Maths Moodle page “Assessments” section.
Updated lesson and assessment schedule for online learning, from 17th august
(Lockdown)**

Attendance

To succeed in maths you should aim to not only attend every class, but actually arrive in class on time. Any student who regularly misses class will be contacted by their lecturer, to discuss attendance. Continued non - attendance may result in a student being withdrawn from the course.

Your attendance is tracked on the attendance system called SEATs. If you started at Unitec in 2020, SEATs will link to your student ID card. Swipe your card when you enter each classroom. To see your attendance record you need to download the SEATs App on your phone. Instructions can be found at <https://www.unitec.ac.nz/current-students/study-support/class-attendance>

Assessments

You can use the table below to keep track of your marks. (They will also be available on Moodle.)

My results			
Assessment	Maximum	My Result	Resit test (if needed)
Moodle Quiz 1 Rounding	(1%)		
Moodle Quiz 2 Measurement conversions	(1%)		
Moodle Quiz 3 3 Fractions decimals and percentages	(1%)		
Moodle Quiz 4 Ratios, tablet and drug calculations	(1%)		
Moodle Quiz 5 Drug calculations and infusions	(1%)		
Moodle Quiz Portfolio total	5%		
Assignment One			
The Language of Drug Prescriptions	(5%)		
Assignment Two			
Practical Measurement	(5%)		
Assignment Three			
Graphs and Data Tables	(5%)		
Assignment Three			
Graphs and Data Tables	(5%)		
Assignment Portfolio Total	20%		
Test One			
	20%		

Calculations and Estimations			
Test Two Measurement, Fractions and Percentages	25%		
Test Three Ratios & Drug Calculations, infusions	30%		
Course Total	100%		

Topic tests assess your understanding of the work completed in each Topic.

Assignments assess the development of your mathematical skills and thinking. You will have some class time to work on these. You will be expected to work collaboratively with a group of 2-3 students. You will then have time to complete them at home. Assignments will require you to explain your mathematical understanding in words rather than just calculate answers.

Moodle Quizzes are designed to help reinforce recent learning. You will have one opportunity to redo any incorrect answers before submitting your attempt.

Resits: If you gain less than 50% in a test there will be one opportunity to resit a version of the test in week 16 of the semester. The maximum mark you can gain in a test resit is 50%.

Assessment policy

1 Waeture Aromatawai | Assessment Regulations

The due dates for all summative assessment work will be notified at the commencement of each course.

1.1 Paparahi Aromatawai | Assessment basis

Courses in this programme are assessed using the 11-point Achievement Based Assessment System. To gain the New Zealand Certificate in Study and Career Preparation (Level 4) students need to pass four courses, including Identity & Communication, each of which is worth 15 credits.

Students must attempt all assessment activities in order to pass and receive credit for this course.

This means that, to pass the course, you must submit work for each assessment. However, you do not need to get a pass grade (half of the required marks) for each assessment. To pass the course, you only need to get an overall mark of 50%. This means that if you fail one assessment you can make up the marks in another assessment.

1.2 Ākoranga Taumata | Course grades

Course grades will be determined by the mathematical aggregation of weighted assessment marks and reported according to the following scales. Students must obtain at least a 50% overall score in a course in order to pass achievement-based assessment courses.

Table 3: Achievement-based (11-point) Assessment Grade Distribution

Grade	Meaning	Result	Percentage
A+	Distinction	Credits Earned	90 – 100
A	Distinction	Credits Earned	85 – 89

A-	Distinction	Credits Earned	80 – 84
B+	Merit	Credits Earned	75 – 79
B	Merit	Credits Earned	70 – 74
B-	Merit	Credits Earned	65 – 69
C+	Pass	Credits Earned	60 – 64
C	Pass	Credits Earned	55 – 59
C-	Pass	Credits Earned	50 – 54
D	Fail	No Credits Earned	40 – 49
E	Fail	No Credits Earned	0 – 39

1.3 Paearu Taumata | Grade Criteria

Students may be awarded one of the following grades for a course as per the criteria described in Table 4:

Table 4: Grade Criteria

Grade	Meaning	Criteria
CR	Credit Recognition	The student has applied for and been awarded a credit recognition from another qualification
CTG	Continuing	The course runs for more than one semester and the final Summative Assessment has not yet occurred. No credits earned
DEF	Deferred	The student has approval to complete a course assessment beyond the scheduled date. Unless an exception has been approved, any deferred grade remaining on a student's record beyond a duration equal to that of the original course will be changed to the grade to which the Student would otherwise be entitled. No credits earned.
DNC	Did not Complete	The grade DNC (Did Not Complete) is recorded if a student has either withdrawn after 75% of the scheduled course duration; or not attempted a compulsory item of assessment within a Course. No credits earned.
R	Restricted Pass	The student has been awarded a restricted pass subject to the relevant clause in this schedule. Credits earned.
W	Withdrawn	The student withdraws from a course after 10% of the scheduled course duration and up to, or at, the date at which 75% of the scheduled course has passed. No credits earned.
#	Estimated Grade	If any portion of summative assessment has been estimated, the final grade will be an estimated grade, and annotated “#” on the student's academic record.

1.4 Aromatawai Mahinga | Assessment Procedures

1.4.1 Aromatawai I Roto I Te Reo | Assessment in Te Reo

All students have the right to submit any summative assessment task in Te Reo Māori. The process for submission of summative assessment work in Te Reo Māori is detailed on the programme Moodle pages and other course material.

Assessment in Te Reo Māori is governed by the Unitec Assessment in Te Reo Māori procedure.

1.4.2 Tāpaetanga Tōmuri | Submission and Late Submission of Work

- a. The due dates for all summative assessment work will be notified at the commencement of each course. Lecturers may use an oral examination to ensure students understand any written material submitted.

- b. Any assessment that is submitted late (and does not have a prior approved extension or the student has not applied for and received an Affected Performance Consideration approval will be penalised by a deduction of 10% per day of the student's assignment mark, up to five (5) days, inclusive of weekends.
- c. Applications for extensions must be made in writing (either electronically, or in hard copy) to the course lecturer on or before the due date. A record of this extension is to be forwarded to the relevant academic authority.
- d. Any extension that is granted will have the following conditions:
 - For assessments/assignments, students will be given up to three consecutive days (72 hours) to complete the assignment/assessment and the assignment/assessment will be marked as usual.
 - For tests/examinations, the extension will be set at an appointed time or at the next opportunity, as instructed by the lecturers.
 - Affected Performance Consideration – if a student is not able to meet these requirements they may be able to apply for Affected Performance Consideration see 1.4.4.
- e. No assignments will be accepted five (5) days (inclusive of weekends) after the due date. Students who do not attempt a compulsory item of assessment may be awarded a 'Did Not Complete' for the whole course and may not earn any credits for the course.

1.4.3 Whakamātautau Anō | Resubmission or Reassessment

A student may apply to undertake a resubmission/reassessment **for a failed assessment *within 5 days*** of receiving their marked assessment.

Assignments that are handed in late are not eligible for resubmission or reassessment.

- a. Students are entitled to one reassessment or resubmission of each failed assessment event.
- b. All resubmissions/reassessments will be carried out within a specified time period as agreed with the relevant academic authority.
- c. In all cases for resubmission, the original marked assignment will accompany resubmitted assignments. If resubmitted work is not accompanied by the original marked assignment, the resubmitted work will not be marked and the original grade will stand.
- d. The maximum grade for any resubmission/reassessment of an assessment is the lowest pass grade.

1.4.4 Āhutatanga Aromatawai Motuhake | Affected Performance Consideration

Any student whose performance in a summative assessment is affected by factors beyond their control may apply for Affected Performance Consideration under the following conditions:

1. You are/were **unable to attend** an examination, compulsory assessment or fixed time and place assessment activity due to illness, injury, bereavement or other critical circumstances.
2. Your preparation for, or performance in an examination or any summative assessment has been seriously **impaired** due to circumstances beyond your control.

See link below for more details and to download the application form:

<https://www.unitec.ac.nz/current-students/study-support/affected-performance-consideration>

1.4.5 Pāhi Rāhui | Restricted Passes

A 'restricted pass' may be awarded in a course in which a student has narrowly failed and where there is ample evidence that marginal failure is compensated by good overall performance.

- a. A restricted pass is awarded at the discretion of the relevant academic authority and may not be applied for directly by a student. The relevant academic authority may, at their discretion, use a restricted pass to:
 - set conditions for future performance in other courses;
 - prevent a student from using a restricted pass to meet the prerequisite requirements of another course.
- b. A student may decline the award of a restricted pass by notifying the relevant academic authority in writing not later than 20 working days from notification of the results.

1.4.6 Akoranga Tuaruatanga | Repeating Courses

- a. Students may enrol and repeat courses that they have failed, up to two times. Permission to enrol a third time is governed by 1.4.7 below.
- b. Students who are repeating a course would normally be required to submit all assessment items. In some cases, with the prior approval of the relevant academic authority, students may not be required to repeat an equivalent assessment item that they had previously passed. This should be negotiated within the first two weeks of the commencement of the course.

1.4.7 Whakakorenga | Exclusions

- a. Any student who, over the last four semesters of his or her studies at Unitec and any relevant study at another institution, has not achieved a pass grade in courses equivalent to one half or more of the credits in which he or she has been enrolled over that period, may be excluded by the relevant academic authority from enrolment in assessed courses in any programme, and may not be permitted to re-enrol in any programme without the prior written permission of the relevant academic authority.
- b. A student who has not achieved a pass grade in the same course on two occasions shall not be enrolled again for that course except with the permission of the relevant academic authority.
- c. The relevant academic authority will advise the student in writing of their decision, and the reasons for such decision, and any orders made.

1.5 Examination Regulations

All examinations in this programme are governed by the Unitec Examinations Regulations.

1.6 Tono Pīra | Appeals

Students may appeal the decisions made under these regulations in accordance with the Student Appeal Procedure.

1.7 Student Behaviour

According to the Unitec Student Disciplinary Statute:

Unitec expects students to behave in ways that do not impact negatively on the work or day-to-day experiences at Unitec of any other members of the Unitec community. If students engage in prohibited conduct, disciplinary action can be taken. Examples of prohibited conduct are: discrimination, harassment, presenting falsified data and plagiarism. [The full Student Disciplinary Statute can be found here.](#)

Code of Behaviour

Unitec's aim is to create an environment which supports the learning of all students

Students are expected to:

- Respect the cultures and ideas of others

- Respect gender differences and attitudes
- Respect the property of others
- Respect Unitec property and to not remove any equipment, books or other material without permission
- Respect Unitec staff
- Respect lecturers' expectations of appropriate behaviour in class, including:
 - **Turning cell phones off while in class**
 - Not talking when anyone else is
 - Actively participating in class.

Homework

Practising new learning and revising are essential for success in mathematics.

It is expected that you will spend at least 5 to 6 hours a week working independently on your maths, in addition to the 5 hours a week of class time.

Allocate these hours of independent work to ensure that each week you are:

- Working through homework exercises related to each class.
- Revising previous work: Read back over the week's notes or exercises. Also look back at previous weeks' exercises and re-do a few to remind yourself of what you have forgotten.
- Practising your times tables and basic drills (use the drills given in the workbooks to help with this).

Textbook

The textbook used in this course is "Nursing Calculations" by John D. Gatford and Nicole Phillips, Elsevier/Churchill Press.

Bridgepoint copies are available for use in class. UNITEC library also has paperback and online copies available.

If you wish to purchase a copy (recommended) it is available at:

- It is available on line at:
The Book Depository <http://www.bookdepository.com/search?searchTerm=nursing+calculations>
On 20th February 2020 the sale price was NZ\$30.92 for the 2016 edition, (normally \$37.57).
- Look for second hand older editions (just as good as the new ones) on Trade Me.

The Waitakere campus library has additional books covering drug calculations which you may find useful to refer to. These are shelved under the Dewey number 615.14.

Stationery requirements

- Use a maths exercise book (A4 size) You will also be given workbooks. A clear file folder is a useful way to store returned assignments and tests.
- Pen, pencil eraser and ruler required.
- Apart from Assignment 3, this course **does not** use calculators.

Maths learning support

Maths help is available through the **Student Services, Maths and Science Learning Advisors**.

The Maths and Science Learning Advisors are located at Te Puna, building 180 at Mt Albert campus and Waitakere campus in Room 510-3015 (3rd floor, over the sky bridge) in the Library.

The Maths and Science Learning Advisors are Lance Laulala llaulala@unitec.ac.nz (Mt Albert) and Margaret Evans mevans@unitec.ac.nz (who is at both Waitakere and Mt Albert).

Margaret is available at Waitakere campus in Room 510-3015 in the Library, on Thursdays from 9am - 4.20pm and on Fridays from 9am to 1.20pm (or later by arrangement).

Drop - in at lunchtimes - Mt Albert 12pm - 1pm, Waitakere on Thursdays and Fridays 12.30pm - 1.30pm. Waitakere students drop in any time on Thursdays or Fridays to see if Margaret is free, (Room 510-3015 in Library), or book an appointment at the Library desk.

Book an appointment - Bookings can be for 1 person, or a group of classmates, for a one-hour session at either campus by phoning **free phone number 0800 10 7510** or by asking at the Library Askme desk. You can also book online using a form at this link: <https://unitec.wufoo.com/forms/z1n2mfaj13zkyko/>

Mt Albert – Use the Maths and Science Study Space on level 2 of Te Puna library commons is a place you can use at any time to do your maths work. This space has desks and whiteboards for student use. Lance and Margaret are there to give you help if you need it & they are not with another student on a pre booked appointment.

Moodle Site - Resources

On the Nursing Maths Moodle site, you will find

- Course Information
- Moodle Quiz assessments
- Extra revision material in each topic
- Copies of practice tests and other material used in class.
- Links to web based resources, including DIY Maths which gives useful additional learning and revision experiences.

Web-based online maths resources can be another source of help:

Use the on-line maths learning activities found by visiting the UNITEC library link

<http://libguides.unitec.ac.nz/DIYmaths> .

There is also a link to DIY maths on the Maths Nursing Moodle page.

A useful website to fill the gaps of Maths you have forgotten: <https://www.khanacademy.org/math>

Here are some further links to on-line quizzes and materials you may find useful to practice Metric Conversions, and Drug Calculations (topic three test).

<http://www.nursingnumeracy.info/page11/page5/page5.html>

<http://www.testandcalc.com/quiz/testtab.htm>

<http://www.testandcalc.com/quiz/index.asp>

Student Support

If you worried about your ability to succeed or you have other issues that might stop you from being a successful student, you can contact

- your lecturer
- Unitec Student Services team through the ASKme desk or Unitec website (includes help with fees free and Studylink applications, budgeting advice)
- Academic Development lecturers
- Access4learning (supported learning)
- student well - being services (Te Puna Waiora), such as counselling services, and the medical centre, (including free nurse appointments)

Key to Success

- Attend all classes on time
- Complete all homework and do extra revision
- Ask questions
- Hand in work on time
- Persevere
- Communicate with your lecturer before your course work becomes difficult to complete so a plan can be put in place to manage your circumstances

We hope you have a successful semester. Please do not hesitate to ask any questions.

Kia kaha,
Debbie and Susie