Mathematics Refresher Course (MRC) 2023 for FNAS and FENG students

Aim of Mathematics Refresher Course

The main purpose of the MRC is to help first year students to adapt to the high pace of first year mathematics and to improve the pass rate. To cope with the fast pace and the large quantity of work, the MRC is of utmost importance. Work done at school is revised and new concepts are discussed. These concepts are frequently used during the course of the year, so students will understand it easier since it has already been presented during the MRC.

The modules MTHS111/121/114/124 are prerequisites for many other mathematics and applied mathematics modules. This includes students who are enrolled for programs that have chemistry, biochemistry, physics, mathematics, applied mathematics, statistics as modules and also includes all engineering students. Students taking these modules can easily fall behind, resulting in their studies being prolonged by at least one year, if they fail their mathematics. These students' study time is prolonged by at least one year if they fail MTHS111/121/114/124. In the case of the engineering students, they cannot proceed with any mathematics or/and applied mathematics modules in their second year. It is therefore very important that they pass MTHS111/121/114/124 the first time.

Presentation of MRC

The course is offered during the Registration and Orientation period on all three campuses. See the NWU guide for first years for more information regarding the course times and venues for the different campuses. The course costs R350 and will be deducted from your student account by the end of March 2023. You will receive a printed workbook during the first session.

You need an exercise book of at least 192 pages, a pen or pencil, at least 50 hours, including course times, and commitment to complete the course.

The course consists of a pre- and post-test and exercises that you must complete during the course sessions and in your own time. The course sessions offered are compulsory to attend. The post-test mark will contribute to your participation mark for MTHS111/114.

MRC sessions

Session to be presented:

- Monday 6 February 2023: Pre-test and Algebra
- Tuesday 7 February 2023: Logarithms
- Wednesday 8 February 2023: Functions
- Thursday 9 February 2023: Radians
- Friday 10 February 2023: Trigonometry
- Monday 13 February 2023: Absolute value, Limits and Continuity
- Tuesday 14 February 2023: Differentiation

The times of the sessions for the different campuses will be as follows.

- Potchefstroom campus: 14:00-17:00
- Vanderbijlpark campus: 9:00-12:00
- Mahikeng campus: 10:00-13:00

See the NWU first year guide for the venues on the different campuses.

Students obliged to complete the MRC

Students admitted to the following programs have to attend the refresher course:

- Faculty of Engineering
 - Chemistry (7CG K01 I421P)
 - Chemistry and Mineral Processing (7CG K02 I422P)
 - Computer and Electronics (7CH K01 I424P)
 - Electrical and Electronics (7CN K01 I423P)
 - Electromechanical (7CL K01 I425P)
 - Industrial (7CK K01 I427P)
 - Mechanical (7CJ K01 I426P)
 - Mechatronics (7CR K01 I401P)
- Faculty of Natural Sciences
 - Actuarial Science (2FQ H01 N301P)

- Agricultural Economics (2FD K01 N401M)
- Agronomy and Horticulture (2FD K04 N401M)
- Animal Health (2FD K07 N401M)
- Animal Science (2FD K03 N401M)
- Applied Mathematics and Chemistry (2FF H13 N301P/M)
- Applied Mathematics and Electronics (2FF H14 N301M)
- Applied Mathematics and Mathematics (2FG H03 N301M)
- Biochemistry and Chemistry (2FF H06 N301P/M)
- Botany and Biochemistry (2DK H02 N302P/M)
- Botany and Chemistry (2DJ H03 N302P/M)
- Business Analytics (2FR H01 N301P/V)
- Chemistry and Computer Science (2FF H31 N301M)
- Chemistry and Geography (2DJ H18 N301M)
- Chemistry and Mathematics (2FF H11 N301P/M)
- Chemistry and Physics (2FF H05 N301P/M)
- Chemistry and Physiology (2DK H06 N302P)
- Chemistry, Mathematics and Applied Mathematics (2FF H22 N301P)
- Computer Science and Economics (2FF H28 N301P/V)
- Computer Science and Electronics (2FF H17 N301M)
- Computer Science and Mathematics (2FF H09 N301P/M/V)
- Computer Science and Statistics (2FF H26 N301P/V)
- Electronics and Mathematics (2FF H19 N301M)
- Electronics and Physics (2FF H20 N301M)
- Financial Mathematics (2FS H01 N301P/V)
- Geography and Applied Mathematics (2FF H30 N301P)
- Geography and Computer Science (2DJ H14 N301M)
- Geology and Chemistry (2DJ H07 N302P)
- o Information Technology and Computer Science (2DX H01 N302P/V) if MTHS111 is elected
- Mathematics (2FG H01 N301P)
- Mathematics and Economics (2FF H29 N301P/V)
- Microbiology and Biochemistry (2DK H11 N301P/M)
- Microbiology and Chemistry (2DJ H10 N301P/M)
- Physics and Applied Mathematics (2FF H24 N301P/M)
- Physics and Computer Science (2FF H25 N301P/M)
- Physics and Mathematics (2FF H23 N301P/M)
- Quantitative Risk Management (2FT H01 N301P/V)
- Statistics and Mathematics (2FG H02 N301P/V)
- Urban and Regional Planning (2FE K01 N401P)
- Zoology and Biochemistry (2DK H07 N302P)
- Zoology and Chemistry (2DJ H04 N302P)
- Faculty of Health Sciences
 - Physiology and Biochemistry (8DJ H01 G301P)
- Faculty of Arts
 - \circ $\;$ Any BA with Mathematics as elective $\;$
- Students appointed by the Admission office or Faculty Manager to attend the course for possible
 admission

Contact us

- Potchefstroom campus: Mariette Hitge <u>Mariette.Hitge@nwu.ac.za</u> or 018 2992579
- Vanderbijlpark campus: Ndumiso Ngwekazi <u>Ndumiso.Ngwekazi@nwu.ac.za</u> or 0169103556
- Mahikeng campus: Soga Mkiva <u>Soga.Mkiva@nwu.ac.za</u> or 0183892402