

University of Pretoria Yearbook 2020

BEd Senior Phase and Further Education and Training Teaching (09133031)

Minimum duration of study 4 years

Total credits 680

NQF level 07

Admission requirements

- The following persons will be considered for admission: candidates who are in possession of a certificate that is deemed by the University to be equivalent to the required Grade 12 certificate with university endorsement; candidates who are graduates from another tertiary institution or have been granted the status of a graduate of such an institution; and candidates who are graduates of another faculty at the University of Pretoria.
- Life Orientation is excluded when calculating the APS.
- Prospective students with an APS of 26-27 must write the National Benchmark Test (NBT). Final admission is determined by the Admissions Committee of the Faculty and is based on the results of the NBT.
- As soon as candidates are admitted to the BEd degree, they will be informed that they must register at the University in January of the following year. It is in the interest of prospective students to apply as soon as possible, particularly in respect of financial support and/or residence placement.

University of Pretoria website: www.up.ac.za/education

National Benchmark Test website: www.nbt.ac.za

Minimum requirements

Achievement level

English Home Language or English

First Additional Language

APS

NSC/IEB AS Level

4 D

28

(26 - 27 admission based on the NBT)

* Cambridge A level candidates who obtained at least a D in the required subjects, will be considered for admission. International Baccalaureate (IB) HL candidates who obtained at least a 4 in the required subjects, will be considered for admission.

- An additional subject requirement for elective modules in **economic and management sciences** is Mathematics passed in Grade 12 with an achievement level of 4 (50%–59%) .
- Additional subject requirements for elective modules in **natural sciences** are Physical Science passed in Grade 12 with an achievement level of 5 (60%–69%), and Mathematics passed in Grade 12 with an achievement level of 5 (60%–69%) .

Other programme-specific information

Elective modules

- The following school subjects are specific to only the Senior Phase (SP): Social Sciences, Technology and Natural Sciences and Technology.
- Students who choose one of the combinations in these school subjects must still take another elective to teach in the Further Education and Training (FET) phase.
- The following school subjects can be chosen as SP and FET electives – Art Education, Music Education, IsiZulu, Sepedi, IsiNdebele, Setswana, Afrikaans, English, Mathematics, Life Orientation and Human Movement Studies and Sport Management (Students who choose this last combination of electives must take one up to 3rd year and the other up to 2nd year).
- Students must also choose a different SP subject to teach in Grade 7-9 as another elective up to 2nd year-level.
- The following school subjects are specific to the FET phase – Computer Application Technology, Business Management, Heritage and cultural tourism, Mathematical Literacy, Engineering Graphics and design, Geography, History, Life Sciences, Physical Sciences, Economic and Management Sciences.
- After a Senior Phase and an FET specialisation have been chosen, a student may select only one of the following as an elective – Psychology, Guidance and Counselling (taken up to third-year level), Religion studies (REL 310, 320 is optional and will only be presented if student numbers are sufficient).
- Methodology of elective modules : Students choose at least two methodologies in accordance with the teaching specialisations. The same methodologies will be taken at second-, third- and fourth-year levels.
- All modules from each subject must be taken, except where options are indicated.
- Please note any prerequisites that may be applicable to modules.
- Modules are chosen according to the class timetable. NO TIMETABLE CLASHES ARE ALLOWED.
- JNH 454 First aid is compulsory only for students who take Human Movement Studies and Sport Management as elective up to 3rd year level.

Mathematics modules

- A complete first year with JLW 312 and all Methodologies of Mathematics completes the SP elective.
- A complete second year with WTW 389 or JLW 312 and all Methodologies of Mathematics completes the FET elective.
- WTW 146 and WTW 148 is available to BEd students who take only a single full year of Mathematics as an elective with either WTW 114 or WTW 134 as first semester module.
- WTW 161 and WTW 168 may be added to lists as alternatives used for recognition to replace WTW 126 and 128 or WTW 146 and 148, but are not available for BEd students.

Class attendance

The teacher education programmes of the Faculty of Education have been approved and accredited by the Department of Education. Due to the fact that the Faculty places high emphasis on the development of skills and competences, class attendance is compulsory for all student teachers for the full duration of the training period specified by SAQA (South African Qualification Authority).

Examinations and pass requirements

Special examinations

- A third-year student who has failed a maximum of four semester modules or the equivalent thereof, with a final mark of at least 40% in each, may be admitted by the Dean to a special examination in those modules during January of the following year, provided that this will enable the student to comply with all requirements for

promotion to the fourth year of study.

- A final-year BEd student requiring a maximum of 4 semester modules or the equivalent thereof to complete his or her degree, with a final mark of 40% in each, may be admitted to a special examination, during January of the following year. If the special examination is conducted before 1 February, a student is not required to register again and the examination is treated as a supplementary examination. If the special examination is conducted on or after 1 February, the student must register again for the module(s) in question and the lecturer may require that a semester mark be obtained in an appropriate manner. In such a case, the result of the examination will not be taken into consideration with a view to the graduation ceremonies in March/April.

Pass with distinction

The degree is conferred with distinction to a student who obtains an overall weighted average (GPA) of 75% or higher in the BEd programme, with the condition that the degree is completed in the prescribed 4 years.

Curriculum: Year 1

Minimum credits: 170

Fundamental modules

Academic information management 101 (AIM 101) - Credits: 6.00
Academic information management 111 (AIM 111) - Credits: 4.00
Academic information management 121 (AIM 121) - Credits: 4.00
Literacies in education 110 (JLZ 110) - Credits: 6.00
Literacies in education 111 (JLZ 111) - Credits: 6.00
Literacies in education 120 (JLZ 120) - Credits: 6.00
Literacies in education 121 (JLZ 121) - Credits: 6.00
Academic orientation 109 (UPO 109) - Credits: 0.00

Core modules

Conversational Competence: Sepedi 100 (CCI 100) - Credits: 12.00
Conversational Competence: Setswana 100 (CCW 100) - Credits: 12.00
Conversational Competence: IsiZulu 100 (CCZ 100) - Credits: 12.00
Professional studies 121 (JPS 121) - Credits: 6.00
Education 112 (OPV 112) - Credits: 12.00
Education 122 (OPV 122) - Credits: 12.00

Elective modules

Afrikaans 110 (AFR 110) - Credits: 12.00
Afrikaans 120 (AFR 120) - Credits: 12.00
African languages literature: Capita selecta 121 (AFT 121) - Credits: 12.00
General chemistry 117 (CMY 117) - Credits: 16.00
General chemistry 127 (CMY 127) - Credits: 16.00
Introduction to tourism 110 (EFK 110) - Credits: 12.00
Heritage tourism management 120 (EFK 120) - Credits: 12.00
Economics 110 (EKN 110) - Credits: 10.00
Economics 120 (EKN 120) - Credits: 10.00
English 110 (ENG 110) - Credits: 12.00
English 120 (ENG 120) - Credits: 12.00
Introduction to environmental sciences 101 (ENV 101) - Credits: 8.00
Financial accounting 111 (FRK 111) - Credits: 10.00
Financial accounting 121 (FRK 121) - Credits: 12.00
History 110 (GES 110) - Credits: 12.00
History 120 (GES 120) - Credits: 12.00
Aspects of human geography 156 (GGY 156) - Credits: 8.00
Southern African geomorphology 166 (GGY 166) - Credits: 8.00
Introductory genetics 161 (GTS 161) - Credits: 8.00
Informatics 183 (INF 183) - Credits: 3.00
Art education 100 (JKG 100) - Credits: 6.00
Art education 101 (JKU 101) - Credits: 18.00
Life orientation 110 (JLO 110) - Credits: 12.00
Life orientation 120 (JLO 120) - Credits: 12.00



Human movement studies and sport management 112 (JMB 112) - Credits: 6.00
Human movement studies and sport management 113 (JMB 113) - Credits: 6.00
Human movement studies and sport management 122 (JMB 122) - Credits: 6.00
Human movement studies and sport management 123 (JMB 123) - Credits: 6.00
Music education 101 (JMO 101) - Credits: 16.00
Music education 102 (JMO 102) - Credits: 8.00
Music education 181 (JMO 181) - Credits: 16.00
Music education 182 (JMO 182) - Credits: 8.00
Design and technology 110 (JOT 110) - Credits: 12.00
Design and technology 120 (JOT 120) - Credits: 12.00
Engineering graphics and design 110 (JTT 110) - Credits: 12.00
Engineering graphics and design 120 (JTT 120) - Credits: 16.00
Natural science 115 (JWT 115) - Credits: 8.00
Natural science 125 (JWT 125) - Credits: 8.00
Molecular and cell biology 111 (MLB 111) - Credits: 16.00
Introduction to isiNdebele Grammar – Capita selecta 110 (NDE 110) - Credits: 12.00
Business management 114 (OBS 114) - Credits: 10.00
Business management 124 (OBS 124) - Credits: 10.00
First course in physics 114 (PHY 114) - Credits: 16.00
First course in physics 124 (PHY 124) - Credits: 16.00
Physics for biology students 131 (PHY 131) - Credits: 16.00
Theory of religion 110 (REL 110) - Credits: 12.00
Kaleidoscope of religions 120 (REL 120) - Credits: 12.00
Sepedi for beginners 110 (SEP 110) - Credits: 12.00
Introduction to Sepedi grammar - Capita Selecta 111 (SEP 111) - Credits: 12.00
Sepedi 120 (SEP 120) - Credits: 12.00
Psychology 110 (SLK 110) - Credits: 12.00
Psychology 120 (SLK 120) - Credits: 12.00
Setswana for beginners 110 (STW 110) - Credits: 12.00
Introduction to Setswana grammar – capita selecta 111 (STW 111) - Credits: 12.00
Setswana 120 (STW 120) - Credits: 12.00
Calculus 114 (WTW 114) - Credits: 16.00
Mathematics 124 (WTW 124) - Credits: 16.00
Precalculus 133 (WTW 133) - Credits: 8.00
Mathematics 134 (WTW 134) - Credits: 16.00
Calculus 143 (WTW 143) - Credits: 8.00
Linear algebra 146 (WTW 146) - Credits: 8.00
Calculus 148 (WTW 148) - Credits: 8.00
isiZulu for beginners 110 (ZUL 110) - Credits: 12.00
Introduction to isiZulu grammar – Capita selecta 111 (ZUL 111) - Credits: 12.00
isiZulu 120 (ZUL 120) - Credits: 12.00



Curriculum: Year 2

Minimum credits: 170

Core modules

Education 212 (OPV 212) - Credits: 20.00

Education 222 (OPV 222) - Credits: 20.00

Teaching practice 280 (PRO 280) - Credits: 6.00

Elective modules

Afrikaans 214 (AFR 214) - Credits: 20.00

Afrikaans 220 (AFR 220) - Credits: 20.00

African languages literature: *Capita selecta* 220 (AFT 220) - Credits: 20.00

Plant biology 161 (BOT 161) - Credits: 8.00

Physical chemistry 282 (CMY 282) - Credits: 12.00

Analytical chemistry 283 (CMY 283) - Credits: 12.00

Organic chemistry 284 (CMY 284) - Credits: 12.00

Inorganic chemistry 285 (CMY 285) - Credits: 12.00

Tourism and representation 210 (EFK 210) - Credits: 20.00

Community-based tourism 220 (EFK 220) - Credits: 20.00

Economics 214 (EKN 214) - Credits: 16.00

Economics 234 (EKN 234) - Credits: 16.00

Modern English literature and English studies 210 (ENG 210) - Credits: 20.00

English 220 (ENG 220) - Credits: 20.00

Financial accounting 211 (FRK 211) - Credits: 16.00

Financial accounting 221 (FRK 221) - Credits: 16.00

Aspects of African history 210 (GES 210) - Credits: 20.00

The shaping of a modern South Africa 220 (GES 220) - Credits: 20.00

Process geomorphology 252 (GGY 252) - Credits: 12.00

Geographic information systems introduction 221 (GIS 221) - Credits: 12.00

Statistics for teachers 220 (JGI 220) - Credits: 13.00

Geometry for teachers 210 (JGT 210) - Credits: 12.00

Art education 200 (JKG 200) - Credits: 12.00

Art education 201 (JKU 201) - Credits: 20.00

Life orientation 210 (JLO 210) - Credits: 12.00

Life orientation 220 (JLO 220) - Credits: 12.00

Methodology of Afrikaans 200 (JMA 200) - Credits: 6.00

Human movement studies and sport management 212 (JMB 212) - Credits: 10.00

Human movement studies and sport management 213 (JMB 213) - Credits: 10.00

Human movement studies and sport management 222 (JMB 222) - Credits: 10.00

Human movement studies and sport management 223 (JMB 223) - Credits: 10.00

Methodology of Design and Technology 201 (JMC 201) - Credits: 6.00

Methodology of Economics 201 (JMD 201) - Credits: 6.00

Methodology of Accounting 203 (JMD 203) - Credits: 6.00

Methodology of Business studies 205 (JMD 205) - Credits: 6.00

Methodology of Tourism 206 (JMD 206) - Credits: 6.00

Methodology of English 200 (JME 200) - Credits: 6.00



Methodology of Religion studies 200 (JMF 200) - Credits: 6.00
Methodology of Geography 200 (JMG 200) - Credits: 6.00
Methodology of History 200 (JMH 200) - Credits: 6.00
Methodology of Art education 201 (JMK 201) - Credits: 6.00
Methodology of Life Orientation and Physical Education 201 (JML 201) - Credits: 6.00
Methodology of Music education 200 (JMM 200) - Credits: 6.00
Methodology of Sciences 203 (JMN 203) - Credits: 6.00
Music education 201 (JMO 201) - Credits: 8.00
Music education 202 (JMO 202) - Credits: 8.00
Music education 203 (JMO 203) - Credits: 12.00
Music education 204 (JMO 204) - Credits: 12.00
Methodology of Mathematics 204 (JMW 204) - Credits: 6.00
Methodology of IsiNdebele 200 (JND 200) - Credits: 6.00
Design and technology 210 (JOT 210) - Credits: 20.00
Design and technology 220 (JOT 220) - Credits: 20.00
Design and technology 240 (JOT 240) - Credits: 12.00
Methodology of Sepedi 200 (JSP 200) - Credits: 6.00
Methodology of Setswana 200 (JSW 200) - Credits: 6.00
Engineering graphics and design 230 (JTT 230) - Credits: 12.00
Engineering graphics and design 240 (JTT 240) - Credits: 12.00
Guidance and counselling 210 (JVB 210) - Credits: 12.00
Guidance and counselling 220 (JVB 220) - Credits: 12.00
Natural science 230 (JWT 230) - Credits: 12.00
Methodology of isiZulu 200 (JZL 200) - Credits: 6.00
isiNdebele 210 (NDE 210) - Credits: 20.00
Business management 210 (OBS 210) - Credits: 16.00
Business management 220 (OBS 220) - Credits: 16.00
Waves, thermodynamics and modern physics 255 (PHY 255) - Credits: 24.00
General physics 263 (PHY 263) - Credits: 24.00
Dynamics of religion 210 (REL 210) - Credits: 20.00
Ancient religions and health 220 (REL 220) - Credits: 20.00
Sepedi 210 (SEP 210) - Credits: 20.00
Sepedi grammar – Capita selecta 211 (SEP 211) - Credits: 20.00
Sepedi 220 (SEP 220) - Credits: 20.00
Setswana 210 (STW 210) - Credits: 20.00
Setswana Grammar – Capita Selecta 211 (STW 211) - Credits: 20.00
Setswana 220 (STW 220) - Credits: 20.00
Mathematics 124 (WTW 124) - Credits: 16.00
Calculus 153 (WTW 153) - Credits: 8.00
Linear algebra 211 (WTW 211) - Credits: 12.00
Calculus 218 (WTW 218) - Credits: 12.00
Techniques of analysis 224 (WTW 224) - Credits: 12.00
Vector analysis 248 (WTW 248) - Credits: 12.00
Animal diversity 161 (ZEN 161) - Credits: 8.00
isiZulu 210 (ZUL 210) - Credits: 20.00
IsiZulu grammar – Capita selecta 211 (ZUL 211) - Credits: 20.00



isiZulu 220 (ZUL 220) - Credits: 20.00



Curriculum: Year 3

Minimum credits: 170

Core modules

Classroom literacies 300 (JLZ 300) - Credits: 12.00
Education 312 (OPV 312) - Credits: 30.00
Education 322 (OPV 322) - Credits: 30.00
Teaching practice 380 (PRO 380) - Credits: 6.00

Elective modules

Afrikaans 311 (AFR 311) - Credits: 30.00
Afrikaans 321 (AFR 321) - Credits: 30.00
African languages literature: *Capita selecta* 320 (AFT 320) - Credits: 30.00
South African flora and vegetation 251 (BOT 251) - Credits: 12.00
Plant physiology and biotechnology 261 (BOT 261) - Credits: 12.00
English 310 (ENG 310) - Credits: 30.00
English 320 (ENG 320) - Credits: 30.00
Afrikaans education 361 (JAF 361) - Credits: 12.00
English education 361 (JEN 361) - Credits: 12.00
Art education 300 (JKG 300) - Credits: 8.00
Art education 301 (JKU 301) - Credits: 32.00
Life orientation 310 (JLO 310) - Credits: 20.00
Life orientation 320 (JLO 320) - Credits: 20.00
Life sciences education 310 (JLS 310) - Credits: 12.00
Mathematics education 312 (JLW 312) - Credits: 12.00
Methodology of Afrikaans 300 (JMA 300) - Credits: 6.00
Human movement studies and sport management 312 (JMB 312) - Credits: 15.00
Human movement studies and sport management 313 (JMB 313) - Credits: 15.00
Human movement studies and sport management 322 (JMB 322) - Credits: 15.00
Human movement studies and sport management 323 (JMB 323) - Credits: 15.00
Methodology of Economics 301 (JMD 301) - Credits: 6.00
Methodology of Accounting 303 (JMD 303) - Credits: 6.00
Methodology of Business studies 305 (JMD 305) - Credits: 6.00
Methodology of Tourism 306 (JMD 306) - Credits: 6.00
Methodology of English 300 (JME 300) - Credits: 6.00
Methodology of Religion studies 300 (JMF 300) - Credits: 6.00
Methodology of Geography 300 (JMG 300) - Credits: 6.00
Methodology of History 300 (JMH 300) - Credits: 6.00
Methodology of Art education 301 (JMK 301) - Credits: 6.00
Methodology of Life Orientation and Physical Education 301 (JML 301) - Credits: 6.00
Methodology of Music education 300 (JMM 300) - Credits: 6.00
Methodology of Natural science 304 (JMN 304) - Credits: 6.00
Methodology of Life sciences 308 (JMN 308) - Credits: 6.00
Methodology of Physical sciences 309 (JMN 309) - Credits: 6.00
Music education 301 (JMO 301) - Credits: 10.00
Music education 302 (JMO 302) - Credits: 10.00



Music education 303 (JMO 303) - Credits: 12.00
Music education 304 (JMO 304) - Credits: 12.00
Methodology of Engineering graphics and design 304 (JMT 304) - Credits: 6.00
Methodology of Mathematics 300 (JMW 300) - Credits: 6.00
Methodology of Mathematics Literacy 302 (JMW 302) - Credits: 6.00
Methodology of IsiNdebele 300 (JND 300) - Credits: 6.00
Physical sciences education 310 (JPC 310) - Credits: 12.00
Methodology of Sepedi 300 (JSP 300) - Credits: 6.00
Methodology of Setswana 300 (JSW 300) - Credits: 6.00
Engineering graphics and design 330 (JTT 330) - Credits: 20.00
Engineering graphics and design 340 (JTT 340) - Credits: 20.00
Guidance and counselling 301 (JVB 301) - Credits: 40.00
Mathematical literacy 310 (JWG 310) - Credits: 20.00
Mathematical literacy 320 (JWG 320) - Credits: 20.00
Natural science 315 (JWT 315) - Credits: 20.00
Natural science 325 (JWT 325) - Credits: 20.00
Methodology of isiZulu 300 (JZL 300) - Credits: 6.00
isiNdebele 310 (NDE 310) - Credits: 30.00
Material religion 310 (REL 310) - Credits: 30.00
Sociology of religion 320 (REL 320) - Credits: 30.00
Sepedi 310 (SEP 310) - Credits: 30.00
Setswana 310 (STW 310) - Credits: 30.00
Geometry 389 (WTW 389) - Credits: 18.00
Invertebrate biology 251 (ZEN 251) - Credits: 12.00
African vertebrates 261 (ZEN 261) - Credits: 12.00
isiZulu 310 (ZUL 310) - Credits: 30.00



Curriculum: Final year

Minimum credits: 170

Fundamental modules

Professional practice 471 (JFP 471) - Credits: 3.00

First aid 454 (JNH 454) - Credits: 3.00

Core modules

Research project 461 (JNM 461) - Credits: 12.00

Research project 464 (JNM 464) - Credits: 12.00

Teaching practice 452 (PRO 452) - Credits: 28.00

Teaching practice 453 (PRO 453) - Credits: 28.00

Elective modules

Methodology of Afrikaans 451 (JMA 451) - Credits: 6.00

Methodology of Afrikaans 454 (JMA 454) - Credits: 6.00

Methodology of Design and technology 451 (JMC 451) - Credits: 6.00

Methodology of Design and technology 454 (JMC 454) - Credits: 6.00

Methodology of Economics 451 (JMD 451) - Credits: 6.00

Methodology of Accounting 453 (JMD 453) - Credits: 6.00

Methodology of Business studies 455 (JMD 455) - Credits: 6.00

Methodology of Tourism 456 (JMD 456) - Credits: 6.00

Methodology of Economics 461 (JMD 461) - Credits: 6.00

Methodology of Accounting 463 (JMD 463) - Credits: 6.00

Methodology of Business studies 465 (JMD 465) - Credits: 6.00

Methodology of Tourism 466 (JMD 466) - Credits: 6.00

Methodology of English 451 (JME 451) - Credits: 6.00

Methodology of English 454 (JME 454) - Credits: 6.00

Methodology of Religion studies 451 (JMF 451) - Credits: 6.00

Methodology of Religion studies 454 (JMF 454) - Credits: 6.00

Methodology of Geography 451 (JMG 451) - Credits: 6.00

Methodology of Geography 454 (JMG 454) - Credits: 6.00

Methodology of History 451 (JMH 451) - Credits: 6.00

Methodology of History 454 (JMH 454) - Credits: 6.00

Methodology of Computer application technology 451 (JMI 451) - Credits: 6.00

Methodology of Computer application technology 454 (JMI 454) - Credits: 6.00

Methodology of Art education 451 (JMK 451) - Credits: 6.00

Methodology of Art education 454 (JMK 454) - Credits: 6.00

Methodology of Life Orientation and Physical Education 461 (JML 461) - Credits: 6.00

Methodology of Life Orientation and Physical Education 464 (JML 464) - Credits: 6.00

Methodology of Music education 451 (JMM 451) - Credits: 6.00

Methodology of Music education 454 (JMM 454) - Credits: 6.00

Methodology of Natural science 451 (JMN 451) - Credits: 6.00

Methodology of Life sciences 452 (JMN 452) - Credits: 6.00

Methodology of Physical sciences 453 (JMN 453) - Credits: 6.00

Methodology of Natural science 454 (JMN 454) - Credits: 6.00

Methodology of Physical sciences 456 (JMN 456) - Credits: 6.00
Methodology of Life sciences 458 (JMN 458) - Credits: 6.00
Methodology of Information technology 451 (JMR 451) - Credits: 6.00
Methodology of Information technology 454 (JMR 454) - Credits: 6.00
Methodology of Engineering Graphics and Design 451 (JMT 451) - Credits: 6.00
Methodology of Engineering graphics and design 454 (JMT 454) - Credits: 6.00
Methodology of Mathematics 451 (JMW 451) - Credits: 6.00
Methodology of Mathematical literacy 452 (JMW 452) - Credits: 6.00
Methodology of Mathematics 454 (JMW 454) - Credits: 6.00
Methodology of Mathematics Literacy 455 (JMW 455) - Credits: 6.00
Methodology of IsiNdebele 451 (JND 451) - Credits: 6.00
Methodology of IsiNdebele 454 (JND 454) - Credits: 6.00
Methodology of Sepedi 451 (JSP 451) - Credits: 6.00
Methodology of Sepedi 454 (JSP 454) - Credits: 6.00
Methodology of Setswana 451 (JSW 451) - Credits: 6.00
Methodology of Setswana 454 (JSW 454) - Credits: 6.00
Methodology of isiZulu 451 (JZL 451) - Credits: 6.00
Methodology of isiZulu 454 (JZL 454) - Credits: 6.00

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.