



2023



**CLONARD  
COLLEGE**  
GEELONG

# SCIENCE PATHWAYS GUIDE

BIOLOGY  
CHEMISTRY  
ENVIRONMENTAL SCIENCE  
PHYSICS  
PSYCHOLOGY



Kildare  
EDUCATION  
MINISTRIES

*Clonard College is a Kildare Education Ministries Catholic  
School in the Brigidine Tradition.*

## Summary of courses offered:

*\*course descriptions on TRUE NORTH via PAM*

### Middle years (year 7 – 9).

Course	Compulsory of elective	Further information
Year 7 General Science	Compulsory for the year	Year 7
Year 8 General Science	Compulsory for the year	Year 8
Year 9 General Science	Compulsory for the year	Year 9
Year 9 Life Science *Opt in course	Compulsory for the year	Year 9 Students taking Life Science in Year 9 will not be able to take VCE Physics, Chemistry or Biology, but will still be able to take VCE Environmental Science or Psychology.

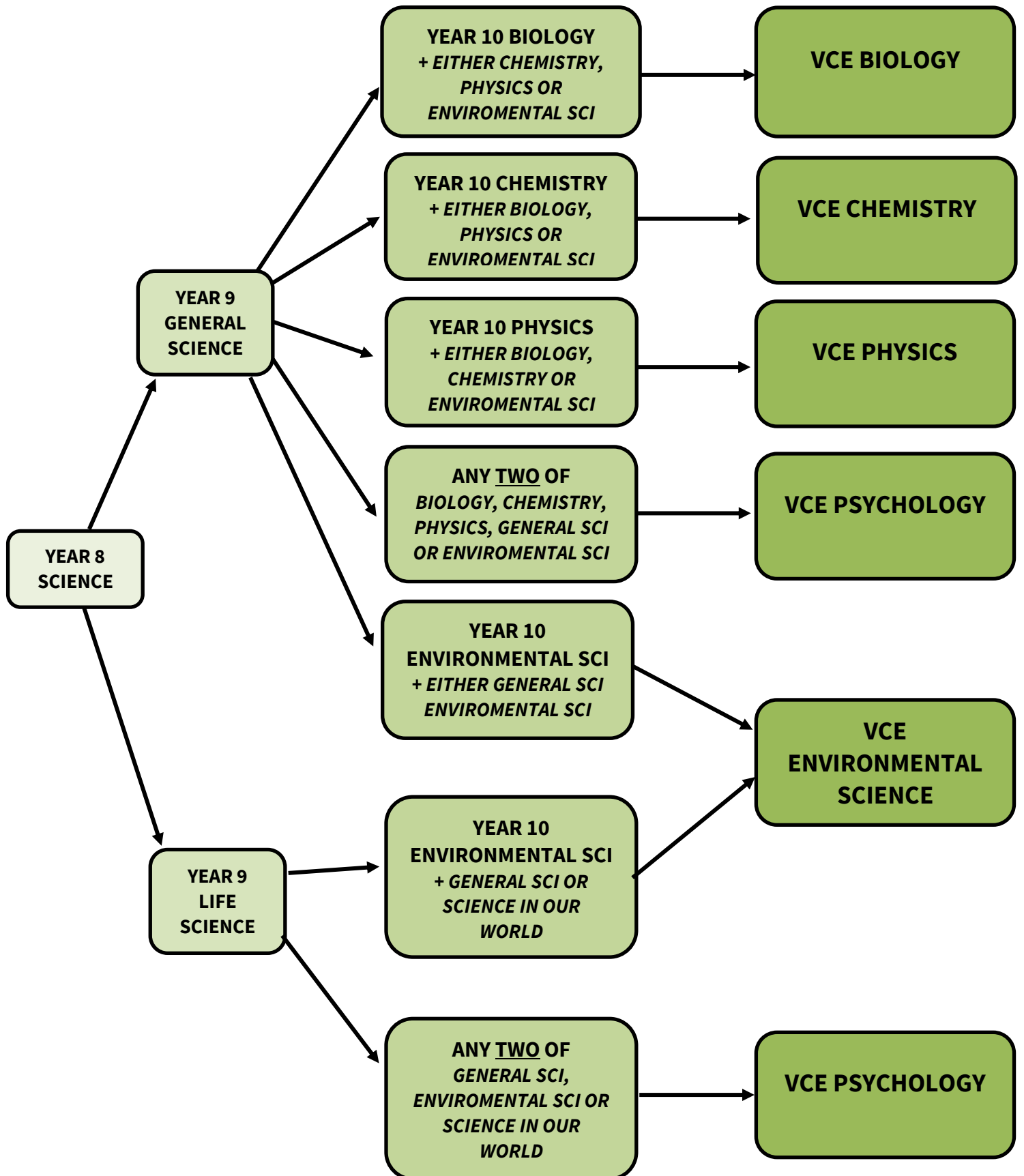
### Senior years (year 10).

Course	Compulsory of elective	Further information
Year 10 Biology	Single semester elective	<u>Pre-requisite</u> – Year 9 General Science Students wishing to take VCE Biology must study this elective plus either Chemistry, Physics or Environmental Science.
Year 10 Chemistry	Single semester elective	<u>Pre-requisite</u> – Year 9 General Science Students wishing to take VCE Chemistry must study this elective plus either Biology, Physics or Environmental Science.
Year 10 Environmental Science	Single semester elective	
Year 10 Physics	Single semester elective	<u>Pre-requisite</u> – Year 9 General Science Students wishing to take VCE Physics must study this elective plus either Biology, Chemistry or Environmental Science.
Year 10 Psychology	Single semester elective	
Year 10 General Science	Single semester elective	
Year 10 Science in our world	Single semester elective	Limited VCE options – see next page

### Senior VCE years (years 11 - 12).

Course	Compulsory of elective	Further information
VCE Biology Units 1 & 2	Elective for the Year	Year 11
VCE Biology Units 3 & 4	Elective for the Year	Year 12
VCE Chemistry Units 1 & 2	Elective for the Year	Year 11
VCE Chemistry Units 3 & 4	Elective for the Year	Year 12
VCE Environmental Science Units 1 & 2	Elective for the Year	Year 11 Year 10 by application (one or two semesters)
VCE Environmental Science Units 3 & 4	Elective for the Year	Year 12 Year 11 for students who completed Units 1&2 in Year 10
VCE Physics Units 1 & 2	Elective for the Year	Year 11
VCE Physics Units 3 & 4	Elective for the Year	Year 12
VCE Psychology Units 1 & 2	Elective for the Year	Year 11 Year 10 by application (one or two semesters)
VCE Psychology Units 3 & 4	Elective for the Year	Year 12 Year 11 for students who completed Units 1&2 in Year 10

## Suggested Pathways into VCE Science



## VCE Units for Year 10 students

VCE Biology, Chemistry and Physics are not well-suited for advancement. It is generally recognised that students benefit from the extra year consolidating the foundations of their understanding and therefore entry into these VCEs is from Year 11 only. If you have excellent academic results, organisational skills and work ethic, you may be considered for advancement in Year 10 into VCE Environmental Science or Psychology (Unit 1&2). Approval to study a VCE course as a Year 10 student is based on student application and staff recommendation as well as availability of places in a Year 11 class. If there is high demand, Year 11 students get preference over Year 10 students. Additional information on VCE Science courses and course descriptions can be obtained from your science teacher and at [www.vcaa.edu.au](http://www.vcaa.edu.au).

## Further advice on VCE Sciences – complementary and supporting subjects

- VCE Chemistry and VCE Physics require a reasonable level of competence in Mathematics.
- Some university Science courses have pre-requisites including VCE Sciences or Mathematics.
- Entry to some Science courses at some Melbourne universities require Mathematics Methods as a pre requisite.
- VCE Chemistry Units 1&2 is strongly advised for students studying VCE Biology or Physics.

## Guide to choosing your science electives

- Research possible careers that you might consider following and look up the course requirements as well as what subjects you will be doing when training for this career. Consider what science topics that you have enjoyed and think about whether any of the junior school electives would allow you to follow your interest
- Keep yourself challenged, don't pick an elective because it sounds easier than another. Your science teacher is the best person to ask about whether she/he thinks if you can handle the concepts associated with a particular elective.
- Keep your Science education as broad as possible. It is important to keep your options open to as many different careers as possible for as long as possible.

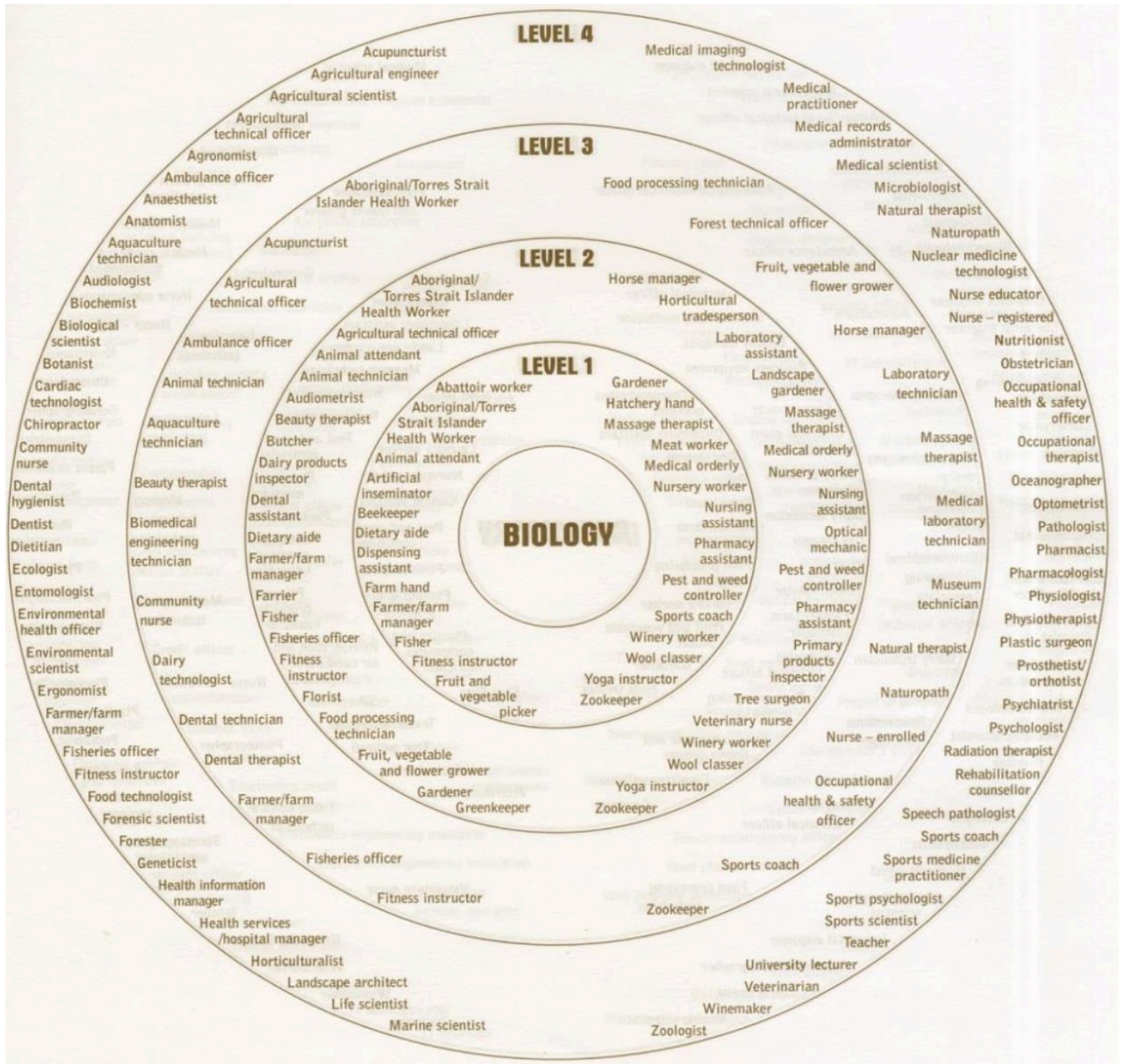
## Guide to choosing your science electives

The following Clonard teachers are available to assist you in your planning and decision making:

- VCE Biology - Jenny Driessen, Sasha Semjonov and Craig Canning
- VCE Chemistry - Gabrielle Tolan and Kim Nguyen
- VCE Environmental Science - Jenny Driessen
- VCE Physics - Emma Rhodes and Ben Hughson
- VCE Psychology - Kristi Cromer, Danielle Higgins, Lolita Fierro and Natalie Ferrarese
  
- Craig Canning - *Learning Leader – Science*
- Gabrielle Mahon – *Careers / Tertiary*

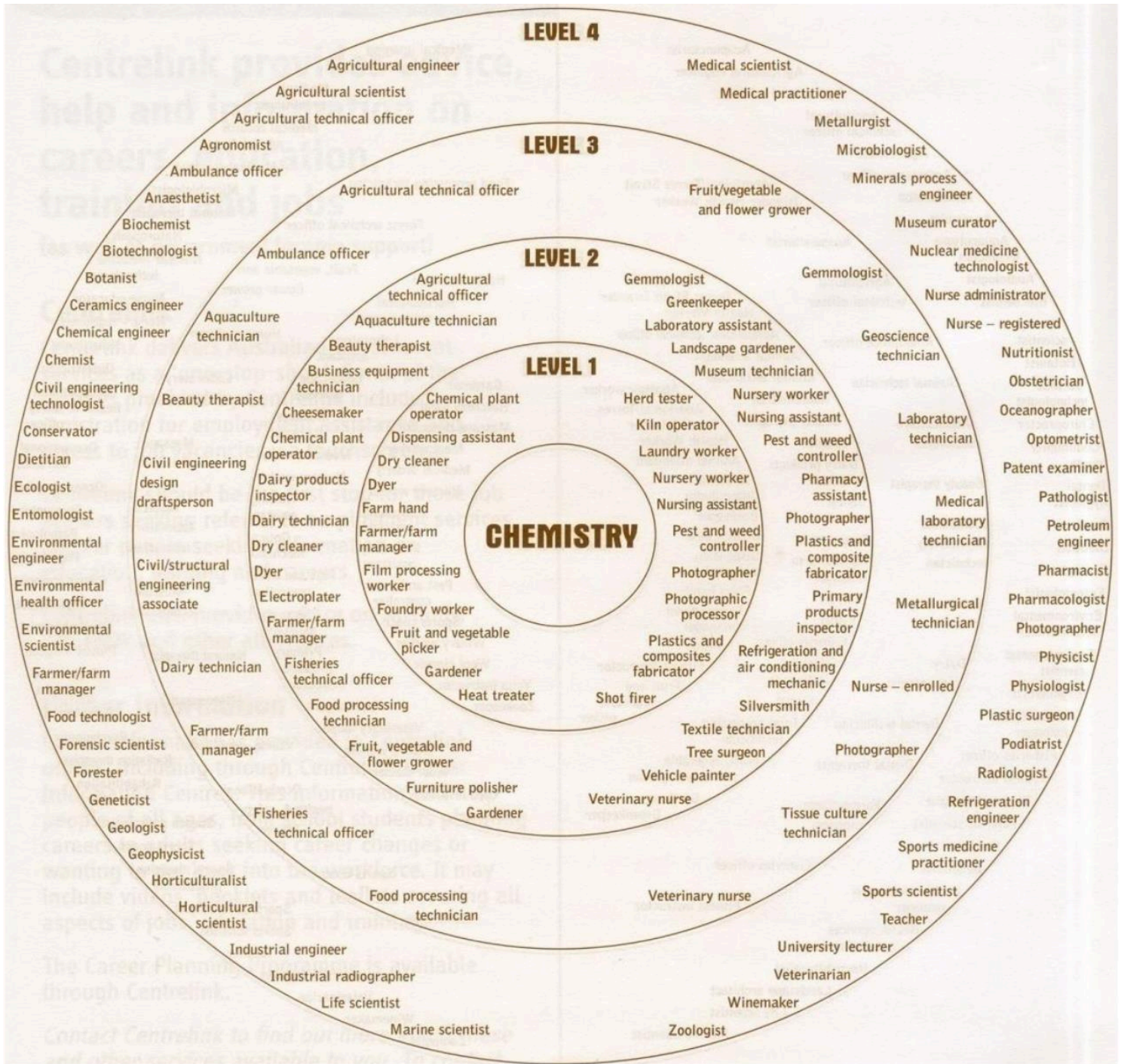
# Careers in Sciences

## BIOLOGY / ENVIRONMENTAL SCIENCE





# CHEMISTRY





# PHYSICS

