# **TERTIARY INSTITUTIONS SERVICE CENTRE**

(Incorporated in Western Australia)

Level 1, 100 Royal Street East Perth, Western Australia 6004 Telephone (08) 9318 8000 Facsimile (08) 9225 7050 http://www.tisc.edu.au/

# 2015 SCALING and ATAR INFORMATION

The purpose of this document is to help you understand some of the outcomes from the 2015 marks adjustment (scaling) process.

In 2015 there were 109 course stages examined, including 27 language courses using interstate syllabi.

Fourteen WACE courses were examined at stage 3 only: Aviation; Biological Sciences; Chemistry; Chinese: Second Language; Economics; Engineering Studies; French; German; Indonesian: Second Language; Italian; Marine and Maritime Studies; Modern History; Philosophy and Ethics; Plant Production Systems.

Automotive Engineering and Technology was examined at stage 2 only.

### The Marks Adjustment Process

The main steps In the marks adjustment process are:

The School Curriculum & Standards Authority moderates and standardises school assessments and standardises exam results, then combines the school assessment and exam results to produce combined marks for each course unit pair studied.

TISC and the School Curriculum & Standards Authority jointly

- Scale stage 2 and stage 3 combined marks (preliminary scaling) to put them on to a common scale so increments can be added
- Add increments, where appropriate, to stage 3 results (also to Mathematics 2C/2D, 3A/3B, 3C/3D and Mathematics: Specialist 3C/3D)
- Combine stage 2 and 3 results within a course to produce a distribution of course results
- Scale the courses
- Adjust Standard Deviations (spread of marks) to the Standard Deviations from preliminary scaling to produce Final Scaled Scores

Full details of the marks adjustment process are at <a href="http://www.tisc.edu.au/static-fixed/statistics/misc/marks-adjustment-process-2010.pdf">http://www.tisc.edu.au/static-fixed/statistics/misc/marks-adjustment-process-2010.pdf</a>

Once the final scaling has been completed, the average of all scaled scores across all courses is 60.

A comparison of average scaled scores from 2014 and 2015 courses shows the 2015 averages are similar to 2014.

Within each course, stage 2 is less academically demanding than stage 3. The completion of courses at stage 3 provides a better preparation for university studies. Universities have encouraged students seeking university admission to undertake studies at stage 3 by providing a 15 mark increment added to final combined marks before scaling, for courses examined at both stage 2 and stage 3. An increment is not necessary if a course is only examined at stage 3. In the case of Mathematics the increment is 10 marks between each of the four unit pairs.

Within a course, the average of stage 2 and of stage 3 scaled scores is different. Approximately 13 marks of the difference between stage 2 and stage 3 scaled score averages is due to the increment of 15. The rest of the difference is attributable to the difference in ability of the students in each stage.

# ATAR

12,500 school leavers achieved an ATAR in 2015 compared to 8,018 in 2014 (the 'half-year cohort').

Percentage of students with an ATAR, using four scaled scores at stage 3

| 2011 | 64.2% |
|------|-------|
| 2012 | 69.9% |
| 2013 | 71.5% |
| 2014 | 75.8% |
| 2015 | 76.5% |
|      |       |

Sixteen school leavers achieved the maximum ATAR of 99.95.

## **Mathematics: Specialist**

The difference in average scaled scores in Mathematics: Specialist 3A/3B and 3C/3D reflects the difference in ability between the students, as well as the increment. Even though it is designated a stage 3 unit pair, Mathematics: Specialist 3A/3B is the lower unit pair of Mathematics: Specialist, in the same way as Physics 2A/2B is the lower unit pair of Physics.

### Mathematics

Mathematics is scaled with an increment of 10 between each of the four unit pairs 2A/2B, 2C/2D, 3A/3B, 3C/3D, ie 0 for 2A/2B, 10 for 2C/2D, 20 for 3A/3B and 30 for 3C/3D.

For Mathematics, the scaling process has to deal with four unit pairs (2AB, 2CD, 3AB, 3CD), instead of two as for all other courses. Due to its large candidature, mathematics is the archetypal 'average' course. These facts together mean that the theoretical highest possible scaled score in Mathematics is constrained to be less than 100, regardless of the ability of the Mathematics candidates at the top end. An adjustment in Mathematics is made at the top end to ensure scaled scores of 100 are achieved, consistent with top scores achieved in Chemistry, Physics and Mathematics: Specialist.

#### **University Competence in English Requirement**

Competence in English for university admission is normally achieved by a scaled score of 50 in an English course.

The following is the percentage of students achieving a scaled score of 50.

| Literature Stage 3 | 91.5% | (in 2015 only 10 students sat Literature at Stage 2) |
|--------------------|-------|--|
| English Stage 2    | 15.4% |  |
| English Stage 3    | 78.9% |  |
| EALD Stage 2       | 39.3% |  |
| EALD Stage 3       | 81.1% |  |
|                    |       |  |

For a number of years the universities have also considered students' standardised exam or standardised moderated school assessments in determining competence in English, for those students whose scaled score is less than 50. Currently the standardised mark required is at least 55 for Curtin, ECU and Murdoch and 60 for UWA. The standardisation parameters (mean 60, standard deviation 14) mean at least 65% (50% for UWA) of English stage 2 students achieve university competence in English.

Overall, 94% of students who have applied for university have achieved university competence in English for at least one university. 80% have achieved competence in English for all four universities.

Students who have sat the WACE examination in one of the three English courses (English, Literature, EALD), and have satisfied other admission requirements for a particular university but have not achieved competence in English for that university, are usually invited via their Universities Admission Advice Letter (UAAL) to sit the Special Tertiary Admissions Test (STAT) early in January to demonstrate their competence in English.

## Further information

More facts on the marks adjustment process, 2015 scaled scores and ATAR distributions and courses used are at www.tisc.edu.au, under *Publications, Reports and Statistics.*