

# Report on the Scaling of the 2014 NSW Higher School Certificate

NSW Vice-Chancellors' Committee – Technical Committee on Scaling



# Contents

Pr	eface	iii
Ac	knowledgements	iv
De	efinitions	v
1	The Higher School Certificate (HSC)1.1Eligibility for an HSC1.2Reporting student achievement in the HSC1.2.1Defining standards by performance bands1.2.2Examination marks1.2.3School assessments1.2.4HSC marks	<b>1</b> 1 1 1 2 2 2 2
2	The Australian Tertiary Admission Rank (ATAR) – an overview2.1Background2.2Categorisation of ATAR courses2.3Eligibility for an ATAR in 20142.4Calculation of the ATAR2.5The ATAR Advice Notice	<b>3</b> 3 4 4 4
3	Calculating aggregates and ATAR eligible percentiles3.1Vervi=3.2The scaling process in 20143.2.1Marks used in the ATAR calculations3.2.2Raw HSC marks3.2.3Combined courses3.2.4Initial standardisation3.2.5Calculating scaled means and standard deviations3.2.6Setting maximum marks3.2.7Scaling individual marks3.2.8Calculating aggregates and ATAR-eligible percentiles3.2.9Calculating the ATAR	<b>6</b> 7 7 7 7 7 7 8 8 8 8 8 9
4	<ul> <li>HSC and ATAR in 2014 - some results</li> <li>Overview</li> <li>Percentage of students receiving an ATAR</li> <li>Number of units of ATAR courses completed</li> <li>Course numbers - Table A1</li> <li>Distributions of HSC marks - Table A2</li> <li>Descriptive statistics of HSC and scaled marks - Table A3</li> <li>Distribution of ATARs - Table A7</li> <li>ATAR percentiles and relationship between ATAR and aggregates - Tables A8, A9</li> <li>Gender differences</li> <li>University offers</li> </ul>	<b>11</b> 11 11 12 12 13 14 14 15 16
5	<ul> <li>Trends and other issues</li> <li>5.1 Variation in patterns of HSC marks – Tables A4, A5</li> <li>5.2 Distributions of English and Mathematics marks: 2011–2014</li> <li>5.3 Courses that contribute to the ATAR – Table A6</li> </ul>	<b>17</b> 17 18 21

6	Frequent	ly asked questions	22		
6.1 Why is my ATAR low in comparison to my HSC marks?					
	6.2 Why	does this course contribute to my ATAR when another course where I received a higher mark does not count?	24		
	6.3 Othe	r frequently asked questions	26		
7	Appendi	ι · · · · · · · · · · · · · · · · · · ·	28		
	Table A1	Course numbers – gender, ATAR eligibility and maximum ATAR by course	29		
	Table A2	Distributions of HSC marks by course	32		
	Table A3	Descriptive statistics and selected percentiles for HSC marks and scaled marks by course	35		
	Table A4	Distributions of HSC marks by course: 2013–2014	40		
	Table A5	Distributions of scaled marks by course: 2013-2014	44		
	Table A6	Courses that contribute to the ATAR	48		
	Table A7	ATAR distribution	51		
	Table A8	ATAR percentiles: 2010-2014	53		
	Table A9	Relationship between ATAR and aggregates: 2010–2014	53		

# Preface

In New South Wales student achievement in Stage 6 (Years 11 and 12) is reported in two ways: through the Higher School Certificate Record of Achievement and through the Australian Tertiary Admission Rank (ATAR).

A student's Higher School Certificate Record of Achievement presents a profile of their achievement in the courses they have completed, both academic and vocational. Their achievement is reported in terms of the standards they have reached in the courses they have completed.

In contrast, the Australian Tertiary Admission Rank (ATAR) is a numerical measure of a student's overall academic achievement in the HSC in relation to that of other students. This measure allows the comparison of students who have completed different combinations of HSC courses and indicates the position of a student in relation to other students. The ATAR is calculated solely for use by universities, either on its own or in conjunction with other selection criteria, to rank and select school leavers for admission to university.

Calculation of the ATAR is the responsibility of the Technical Committee on Scaling on behalf of the NSW Vice-Chancellors' Committee. The Board of Studies, Teaching and Educational Standards NSW (BOSTES) provides the HSC data from which the ATARs are calculated and the Universities Admissions Centre (UAC) advises individual students of their ATARs. Because of confidentiality provisions specified in Government legislation, ATARs cannot be provided to BOSTES, to schools or to other agencies.

This report contains information on the calculation of the ATAR in 2014.

#### **Professor Neville Weber**

Chair, Technical Committee on Scaling February 2015

# **Acknowledgements**

- Calculating individual ATARs each year and distributing them to the students who requested them is a major task. It requires a high degree of expertise, commitment and co-operation between the staff of several agencies:
- staff of the Board of Studies, Teaching and Educational Standards NSW (BOSTES) who supply the HSC data from which the ATARs are calculated
- staff of UAC who distribute the ATARs to individual students, handle enquiries from students following the release of the results, and distribute information about the ATAR to schools during the year
- members of the Technical Committee on Scaling who play a central role with responsibility for translating policy decisions into processes, and for developing and maintaining programs that ensure the integrity of the data and the accuracy of the individual ATARs
- those members of the Technical Committee on Scaling who work closely with the Chair of the Committee when the ATARs are calculated, and at other times during the year.

Without the skill and commitment of these people, the calculation and distribution of the ATARs would not be possible.

# Definitions

### ABS

The ABS is the Australian Bureau of Statistics.

### ATAR cohort

ATAR cohort is used to refer to those students who received an ATAR in a particular year. The students may have accumulated courses over a five-year period.

### ATAR courses

ATAR courses are Board Developed courses for which there are examinations conducted by the Board that yield graded assessments. English Studies and Life Skills courses are not ATAR courses. If students wish to have a VET course contribute to their ATAR eligibility requirements and calculation, they must enrol in the appropriate additional examination course and complete the examination.

### Board Developed courses

Board Developed courses are courses whose syllabuses have been developed by the Board of Studies, Teaching and Educational Standards NSW.

### **Board Endorsed courses**

Board Endorsed courses are courses whose syllabuses have been approved by the Board of Studies, Teaching and Educational Standards NSW but which do not have formal examinations conducted by the Board.

### HSC cohort

HSC cohort refers to students who have completed at least one ATAR course in a particular year.

### The Board

The Board refers to the Board of Studies, Teaching and Educational Standards NSW (BOSTES).

### UAC

UAC refers to the Universities Admissions Centre (NSW & ACT) Pty Ltd.

### VET examination courses

The VET Curriculum Frameworks are based on training packages where the assessment is competency based. As competencebased assessment does not yield a mark that can be used in the ATAR calculations the Board introduced, for each VET Curriculum Framework, an additional course that includes an examination. If students wish to have a VET course contribute to their ATAR eligibility requirements and calculation, they must enrol in the appropriate additional course and complete the examination. These additional courses are termed VET examination courses. Students who do not want their VET courses to contribute towards their ATARs are not required to complete these optional examinations.

### vi Report on the Scaling of the 2014 NSW Higher School Certificate

# I The Higher School Certificate

The Higher School Certificate (HSC) is an exit certificate awarded and issued by the Board of Studies, Teaching and Educational Standards NSW. It marks the completion of 13 years of schooling, is the gateway to further study and employment, and presents a profile of student achievement in a set of courses.

### I.I Eligibility for an HSC

To qualify for an HSC, students must complete a pattern of Preliminary and HSC courses containing at least 12 units of Preliminary courses and at least 10 units of HSC courses.

These HSC courses must include at least:

- six units of Board Developed courses
- two units of a Board Developed course in English (or the new non-ATAR course, English Studies)
- three courses of two unit value or greater (either Board Developed or Board Endorsed courses)
- four subjects.

Further details about HSC eligibility and HSC courses can be found in the Assessment, Certification and Examination Manual, and in the booklet *Higher School Certificate Rules and Procedures*, which are published annually by the Board, and are available on the Board's website at www.boardofstudies.nsw.edu.au.

### 1.2 Reporting student achievement in the HSC

For most ATAR courses, the Board reports student achievement against published standards by:

- an examination mark
- a school assessment
- an HSC mark
- a performance band.

These results are shown on a student's Record of Achievement. For most Board Developed courses, a Course Report is also provided which describes, using performance bands, the standard achieved in the course and provides a graph indicating the student's position in the course candidature.

#### 1.2.1 Defining standards by performance bands

Standards in a course are described in terms of the content, skills, concepts and principles relevant to the course and represent the range of achievement expected of students completing the course. Performance band descriptors, which describe typical achievement at different standards (bands), have been developed for each course. There are six performance bands for 2-unit courses and four performance bands for Extension courses.

The percentage of students in any performance band depends only on how many students enrolled in that course perform at the standard specified by the performance band descriptor. There are no pre-determined percentages of students to be placed in the performance bands.

It follows that, although the standards described by the performance bands in a course will be the same from year to year, **standards in different courses are not the same as they are based on different criteria**. Because of this it should not be expected that the percentages of students in the six bands will be the same across courses. For any course the percentages may also vary from year to year if student performance changes.

The ranges of marks for the bands are as follows:

#### 2-unit courses

Band	1	2	3	4	5	6
Mark range	0-49	50-59	60-69	70-79	80-89	90-100

#### **Extension courses (except Mathematics Extension 2)**

Band	E1	E2	E3	E4
Mark range	0-24	25-34	35-44	45-50

#### **Mathematics Extension 2\***

Band	E1	E2	E3	E4
Mark range	0-49	50-69	70-89	90-100

\*Mathematics Extension 2 students have their achievement for both Mathematics Extension 1 and Mathematics Extension 2 reported using four bands but the mark range is out of 100 rather than 50.

#### 1.2.2 Examination marks

The examination mark reported on a student's Record of Achievement indicates the standard a student has attained in that examination. If, for example, a student's performance in the Society and Culture examination is at the standard described for Performance Band 3, the examination mark reported on their Record of Achievement for that course will lie between 60 and 69. In general this mark, termed the aligned examination mark, will differ from the mark the student actually gained on the examination (the raw examination mark).

What the aligned mark indicates is the standard reached by a student and their position in the performance band. For example, a mark of 62 means that, while the student has performed at a Performance Band 3 standard, their achievement is towards the bottom of this band.

#### 1.2.3 School assessments

To enable school assessments from different schools to be compared, marks submitted by schools (raw assessments) are first moderated using the raw examination marks gained by their students and then aligned to course standards. The school assessments reported on a student's Record of Achievement are the aligned assessments.

Although school assessments are moderated and then aligned against standards, a school's rank order of students in a course is maintained.

#### 1.2.4 HSC marks

For each course, students receive three marks, an examination mark, a school assessment and an HSC mark, all of which have been aligned to the Board's published standards and rounded to whole numbers. **The HSC mark is the average of the examination mark and the school assessment.** It is the HSC mark that determines a student's performance band for the course.

Further details about the Board's processes can be found on the Board's website at www.boardofstudies.nsw.edu.au.

# 2 The Australian Tertiary Admission Rank (ATAR) – an overview

### 2.1 Background

The Australasian Conference of Tertiary Admission Centres (ACTAC) agreed that, as of 2010, all states and territories adopt a common name for the ranking index used to rank students for university admission. The agreed name was the Australian Tertiary Admission Rank (ATAR). The name change was to emphasise the common scale used for reporting student ranks. NSW and the ACT adopted the new name in 2009.

The ATAR is a numerical measure of a student's overall academic achievement in the HSC in relation to that of other students. This measure allows the overall achievement of students who have completed different combinations of HSC courses to be compared. The ATAR is calculated solely for use by tertiary institutions, either on its own or in conjunction with other criteria, to rank and select school leavers for admission. Calculation of the ATAR is the responsibility of the Technical Committee on Scaling on behalf of the NSW Vice-Chancellors' Committee.

The ATAR, which aims to provide a fair and equitable method of ranking applicants from all states, is based on the assumption that the age cohorts from which the states' Year 12 cohorts are drawn are equally able to undertake tertiary study. That is, if everyone in the age group completed Year 12, it would be fair to consider the same proportion of each state's students as admissible to any particular university course.

The result of this procedure in NSW is a number which represents the position of a student in the appropriate age cohort, based on their overall academic achievement in the HSC.

From 1998 until 2013 New South Wales used data from the School Certificate tests administered by the Board as the link that enabled the positions of HSC students relative to their Year 10 group to be estimated from their positions relative to their Year 12 group. With the move to the ATAR in 2009, the School Certificate group was augmented to more accurately reflect the corresponding Year 7 cohort that is used in other states. The last School Certificate tests were held in 2011, so that procedure is no longer available.

In 2014 a two-parameter logistic function was used to translate the HSC students' positions based on their scaled aggregate marks into ATARs. This procedure is consistent with that used in other jurisdictions without Year 10 examinations.

The ATAR is reported as a **number** between 0.00 and 99.95 with increments of 0.05. The ATAR is not a mark. Specifically, a student's ATAR indicates the position of that student relative to their Year 7 cohort. Students who receive an ATAR of 80.00 in 2014, for example, have performed well enough in the HSC to place them 20% from the top of their Year 7 cohort, if all the 2009 Year 7 students completed Year 12 and were eligible for an ATAR in 2014.

Students who indicate on their HSC entry forms that they wish to be notified of their ATARs will receive an ATAR Advice Notice from UAC. ATARs are also made available to institutions for selection purposes.

### 2.2 Categorisation of ATAR courses

ATAR courses are assessed by formal examinations conducted by the Board and have sufficient academic rigour to be regarded as suitable preparation for university study.

ATAR courses are classified as either Category A or Category B courses. The criteria for Category A courses are academic rigour, depth of knowledge, the degree to which the course contributes to assumed knowledge for tertiary studies, and the coherence with other courses included in the ATAR calculations. Category B courses are those whose level of cognitive and performance demands are not regarded as satisfactory in themselves, but their contribution to a selection index is regarded as adequate if the other courses included in the aggregate are more academically demanding.

The Category B courses in 2014 were:

- Automotive Examination
- Business Services Examination
- Construction Examination
- Electrotechnology Examination
- Entertainment Industry Examination
- Financial Services Examination
- Hospitality Examination
- Human Services Examination
- Information and Digital Technology Examination
- Metal and Engineering Examination
- Primary Industries Examination
- Retail Services Examination
- Tourism and Events Examination.

### 2.3 Eligibility for an ATAR in 2014

To be eligible for an ATAR a student must have satisfactorily completed at least 10 units of ATAR courses, which included at least:

- eight units of Category A courses
- two units of English
- three courses of two units or greater
- four subjects.

### 2.4 Calculation of the ATAR

The ATAR is based on an aggregate of scaled marks in 10 units of ATAR courses comprising:

- the best two units of English
- the best eight units from the remaining units, which can include up to two units of Category B courses.

Marks to be included in the ATAR calculations can be accumulated over a five-year period but if a course is repeated only the last satisfactory attempt is used in the calculation of the ATAR.

For students accumulating courses towards their HSC, scaled marks are calculated the year the courses are completed.

### 2.5 The ATAR Advice Notice

The ATAR Advice Notice includes:

- the student's ATAR
- a list of the ATAR courses which the student studied and the categorisation of each course
- the number of units of each ATAR course that were actually included in the calculation of the ATAR.

While ATARs are calculated for all ATAR-eligible students, only those students who indicate on their HSC entry forms that they wish to be notified of their ATAR will receive an ATAR Advice Notice from UAC.

There are two circumstances where an ATAR will not be shown on the ATAR Advice Notice. The first is when a student receives an ATAR between 0.00 and 30.00, in which case the ATAR will be indicated as '30 or less'. The second is when the student has not met the requirements for an ATAR, in which case the statement 'Not Eligible' will appear.

#### An example of an ATAR Advice Notice is given below.

ABN 19 070 055 935 ACN 070 055 935 Quad 2, 8 Parkview Drive, Sydney Olympic Park NSW post: Locked Bag 112, Silverwater NSW 2128 tel: 1300 ASK UAC (1300 275 822) website: www.uacedu.au



#### 2014 Australian Tertiary Admission Rank Advice

MR FRED CITIZEN 8 PARKVIEW DRIVE HOMEBUSH BAY NSW 2128

#### Your Australian Tertiary Admission Rank (ATAR): 74.30 \*SEVEN\*FOUR\*\*\*THREE\*ZERO

Shown below are the ATAR courses which were available for inclusion in your ATAR, together with the units that were actually included in the calculation. Information about ATAR eligibility and the calculation of the ATAR is shown over the page.

Your NSW Board of Studies Student Number: 12345678

Course name	Category	Year completed	Unit value	Units included in calculation of ATAR
Business Studies	А	2014	2	1
English Standard	А	2014	2	2
Mathematics	А	2014	2	2
Studies of Religion 1	А	2014	1	0
French Continuers	А	2014	2	2
French Extension	А	2014	1	1
Hospitality Examination	В	2014	2	2

Issued by UAC without alteration or erasure (see reverse for details of security features) 18 December 2014



Andrea Goodwin Acting Managing Director

The ATAR is a rank between 0.00 and 99.95 with increments of 0.05. It is used by UAC participating institutions to rank and select school leavers for admission to most undergraduate courses. Some courses use selection criteria other than, or in addition to, the ATAR. For more information about the ATAR read pages 41–44 of the UAC 2014-15 Guide or pages 27–30 of the UAC 2014-15 International Booklet or visit UAC's website at www.uac.edu.au/undergraduate/atar/ or www.uac.edu.au/international/atar/

The message 'Not eligible' appears on this advice if you did not satisfactorily complete the requirements for an ATAR as listed over the page.

If you are eligible to have a Limited ATAR calculated it will be sent to you on a separate advice. The Limited ATAR is calculated differently to the ATAR. The calculation of the Limited ATAR is described on page 43 of the UAC 2014-15 Guide or page 29 of the UAC 2014-15 International Booklet or visit UAC's website at www.uac.edu.au/undergraduate/atar/ or www.uac.edu.au/international/atar/

# 3 Calculating the ATAR in 2014

### 3.1 Overview

Tertiary institutions are concerned with ranking school leaver applicants. From their perspective, the importance of HSC marks is that they convey information about a student's position in relation to other students.

With the exception of English, which is compulsory, students are free to choose their courses of study. Consequently, individual course candidatures vary in size and nature, and there are many different enrolment patterns. In 2014 there were 27,535 different enrolment patterns for ATAR-eligible students; only 202 of these 27,535 combinations were completed by 20 or more students and 20,008 were taken by only one student. Given the choice available, it follows that a student's rank in different courses will not necessarily have the same meaning, as good rankings are more difficult to obtain when the student is competing against students of high academic ability.

Because of the lack of comparability of HSC marks achieved in different courses, either when reported against standards or in terms of ranking, marks of individual students are scaled before they are added to give the aggregates from which the ATARs are determined.

The scaling process is designed to encourage students to take the courses for which they are best suited and which best prepare them for their future studies. The underlying principle is that a student should neither be advantaged nor disadvantaged by choosing one HSC course over another. The scaling algorithm estimates what students' marks would have been if all courses had been studied by all students.

The scaling model assumes that a student's position in a course depends on the student's developed ability in that course and the 'strength of the competition'. Since the ATAR is a rank that reflects academic achievement, 'strength of the competition' is defined in terms of the demonstrated overall academic attainment of a course candidature.

Scaling first modifies the mean, the standard deviation and the maximum mark in each course. Adjustments are then made to the marks of individual students to produce scaled marks, which are the marks the students would have received if all courses had the same candidature.

Although scaled marks are generally different from the raw marks from which they are derived, the ranking of students within a course is not changed.

Once the raw marks have been scaled, aggregates are calculated for ATAR-eligible students. Percentiles, which indicate the ranking of students with respect to other ATAR-eligible students, are then determined on the basis of these aggregates. In most cases, the ranking or order of merit based on these aggregates is quite different from the order of merit using aggregates based on HSC marks.

The penultimate step is to determine what the percentiles would have been if all students in their Year 7 cohort completed Year 12 five years later and were eligible for an ATAR. The last step is to truncate these percentiles to the nearest 0.05. These are the ATARs.

Each ATAR corresponds to a range of aggregates and the number of students with each ATAR varies, depending in part on how many candidates tie on the same aggregate.

The scaling process is carried out afresh each year. It does not assume that one course is intrinsically more difficult than another or that the quality of the course candidature is always the same. All students who complete at least one ATAR course in a given year are included in the scaling process for that year. Students who are accumulating courses towards their HSC have their scaled marks calculated in the year the courses are completed.

### 3.2 The scaling process in 2014

The scaling procedure used to produce the aggregates in 2014 was unchanged from that used in 2013.

#### 3.2.1 Marks used in the ATAR calculations

For each course a student completes, the Board provides the following marks:

- a raw examination mark
- a raw moderated school assessment<sup>1</sup>
- an examination mark, which has been aligned to course standards
- a moderated school assessment, which has been aligned to course standards
- an HSC mark.

<sup>1</sup>These are school assessments that have been moderated using the raw examination marks.

All marks are provided on a one-unit basis to one decimal place. In the description of the scaling process that follows, to cater for both 2-unit and Extension courses, marks are described on a one-unit basis.

#### 3.2.2 Raw HSC marks

Raw HSC marks, rather than the Board's reported HSC marks, are used in the scaling process. A student's raw HSC mark in a course is the average of their raw examination mark and their raw moderated school assessment. These marks are not reported to students.

#### 3.2.3 Combined courses

As the Board places English Standard and English Advanced raw marks on a common scale, these courses are combined and scaled as a single course, but are reported as separate courses in order to be consistent with the Board's reporting practice.

#### 3.2.4 Initial standardisation

Before the scaling algorithm is implemented, a linear transformation is applied to the raw HSC marks in each course to set the top mark to a common value. The marks in each course are then standardised to a mean of 25 and standard deviation of 12 on a one-unit basis.

#### 3.2.5 Calculating scaled means and standard deviations

The model underpinning the scaling algorithm specifies that the scaled mean in a course is equal to the average academic achievement of the course candidature where, for individual students, the measure of academic achievement is taken as the average scaled mark in all courses completed. The model specification leads to a set of simultaneous equations from which the scaled means of 2-unit courses are calculated.

The scaled standard deviation for a 2-unit course is the standard deviation of the measure of overall academic achievement of the candidature of that course.

For Extension courses, the scaled means and standard deviations are determined by the performance of the Extension students on the corresponding 2-unit courses. The exceptions are History Extension which can be completed by both Modern History and Ancient History students, and the second Extension courses in English and Mathematics: English Extension 2 and Mathematics Extension 2.

A scaled mean is determined for the Modern History students in History Extension on the basis of their performance in the 2-unit Modern History course. A scaled mean for the Ancient History students in History Extension is found in a similar manner. The scaled mean for History Extension is then set equal to the weighted average of these two scaled means. The scaled standard deviation is found in a similar manner.

Scaled means and standard deviations for English and Mathematics Extension 1 courses are calculated as described above. The scaled mean and standard deviation for the Mathematics Extension 2 course are then determined by the performance of the Extension 2 students in the Mathematics Extension 1 course. For English Extension 2, the scaled mean and standard deviation are determined by the performance of the Extension 2 students in English Advanced. (This option is not available for Mathematics as the Extension 2 students do not complete the Mathematics 2-unit paper.)

#### 3.2.6 Setting maximum marks

The maximum possible scaled mark in a course is determined according to the academic quality of the course candidature in such a way that the maximum possible scaled mark for the combined 2-unit English candidature is 50 on a one-unit basis.

In 2014 the maximum possible scaled mark in a course was given by the smaller of 50 and the scaled mean + 2.48 times the initial scaled standard deviation, where the scaled mean and initial scaled standard deviation of the course are determined using the scaling algorithm.

The number 2.48 was determined on the basis that the maximum possible scaled mark in the combined 2-unit English course is 50. This number is calculated afresh each year.

#### 3.2.7 Scaling individual marks

Once the scaled means and standard deviations are determined, individual raw marks are scaled using a non-linear transformation which preserves the scaled mean and standard deviation of a course and restricts the scaled marks to the range (0-50).

If the actual maximum scaled mark in a course is less than the maximum possible scaled mark a further linear transformation is applied. The effect of this linear transformation is to increase the standard deviation so that the actual maximum scaled mark in the course is changed to be the same as the maximum possible scaled mark. The transformation does not affect the scaled mean. In all tables presented in this report, the modified scaled standard deviations rather than the initial scaled standard deviations are shown.

For some courses with very small candidatures the non-linear transformation is not always appropriate, in which case alternative transformations, which are consistent with the principles of the scaling algorithm, are used.

#### 3.2.8 Calculating aggregates and ATAR-eligible percentiles

Aggregates of scaled marks are calculated to one decimal place according to the rules described in section 2.4. In 2014 there were 4,420 distinct aggregates. There are a large number of tied results with some aggregates shared by more than 30 students.

ATAR-eligible percentiles, which show the position of students relative to their ATAR cohort, are then determined for these aggregates. The ATAR-eligible percentile corresponding to a particular aggregate is the percentage of the ATAR cohort who received an aggregate mark less than or equal to that aggregate.

Table 3.1 shows the ATAR-eligible percentiles corresponding to selected aggregates for the 2014 ATAR cohort. From the table it can be seen that, for example, 76.9% of the 2014 ATAR cohort received an aggregate mark of 350 or less.

Aggregate	ATAR-eligible percentile
450.0	98.9
400.0	90.8
350.0	76.9
300.0	60.3
250.0	43.1
200.0	27.1
150.0	14.1

#### Table 3.1 ATAR-eligible percentiles corresponding to selected aggregates: 2014

#### 3.2.9 Calculating the ATAR

In 2014 a two-parameter logistic function was used to translate the ATAR-eligible percentiles into ATARs. The logistic function approach was adopted in 1998 by other jurisdictions without Year 10 examinations. The procedure was based on the patterns observed in NSW data.

To illustrate the pattern, Figure 3.1 shows the proportion of the 2010 School Certificate cohort who were eligible for an ATAR two years later in 2012 plotted against the total School Certificate mark. Clearly almost all of the most able students stayed on to Year 12 and applied for an ATAR and the proportion of ATAR-eligible decreased as the School Certificate mark decreased. The larger spikes at the extreme School Certificate marks are due to the proportions being based on very small numbers of candidates. The shape of the plot in Figure 3.1 can be approximated by a two-parameter logistic function.





The specific form of the logistic function will depend on the proportion of students in the target population who are ATAReligible. This proportion is called the participation rate. In 2014 the participation rate in NSW, determined using ABS data, was 59.6%, up from 58.9% in 2013.

The anchor frequency is the number, N, allocated to the 99.95 category. The top category should contain 1/2000th of the target population as all the most able candidates are assumed to complete Year 12 and apply for an ATAR. In 2014 this target frequency was N = 47.

The logistic model is log [  $p_j / (1 - p_j)$  ] = a + b  $x_j$ , where Np<sub>j</sub> is the target frequency of students at ATAR  $x_j$ , for  $x_j$  less than 99.95. To be consistent with recent NSW ATAR patterns the minimum ATAR awarded was set at 8.00. The target proportions were then rescaled to ensure the target proportions summed to 1. The parameters in the logistic model were estimated using historical ATAR and participation rate data for NSW for 2006–2013.

Starting with the highest aggregate, the candidates are progressively allocated to ATAR categories to achieve the cumulative target frequencies. There is noise in the allocation due to ties in the aggregates. The resulting pattern is shown in Figure 3.2.





The relationship between the ATAR and ATAR-eligible percentile in 2014 is shown in Figure 3.3.





The relationship between aggregates and ATARs in 2014 is shown graphically in Figure 3.4.



Figure 3.4 Relationship between aggregate and ATAR in 2014

Each ATAR corresponds to a range of aggregate marks. The range of aggregates corresponding to one ATAR is greatest in the extremes of the distribution of aggregates and smallest near the middle of the distribution of aggregates. Table 3.2 gives ATARs for selected aggregates based on the 2014 data.

Table 3.2	Relationship	between	aggregate	and ATAR
-----------	--------------	---------	-----------	----------

Aggregate	ATAR
450.0	99.30
400.0	94.45
350.0	85.95
300.0	75.60
250.0	64.25
200.0	52.40
150.0	39.90

# 4 The HSC and ATAR in 2014 – some results

### 4.1 Overview

In 2014 there were two new ATAR courses, Mathematics General 2 which replaced General Mathematics, and Information and Digital Technology Examination which replaced Information Technology Examination.

A total of 75,388 students completed at least one HSC course in 2014, but 3,682 were removed from the database as they completed no ATAR course. Of the remaining pool of 71,706 students, 91.1% received an HSC and 77.4% received an ATAR. Only 11 students who received an ATAR were not eligible for the HSC. While courses contributing to the underlying aggregate may be accumulated over a five-year period, 94.3% of those receiving an ATAR in 2014 included only 2014 courses in their aggregate.

The percentage of students enrolled in at least one ATAR course who were female (51.7%) was lower than the previous year, as was the percentage of students who received an ATAR who were female (53.1%).

### 4.2 Percentage of students receiving an ATAR

HSC students who do not receive an ATAR fall into one of two broad groups:

- 1. Those who are studying less than 10 units. These include private study students who enrol in one or two courses, mature age students who are studying a limited HSC program and students who are accumulating their HSC over two or more years.
- Those who enrol in a full HSC program which does not satisfy the requirements for an ATAR. These students normally
  complete six or eight units of Board Developed courses, and choose the remaining units from Board Endorsed courses.
  They receive an HSC but not an ATAR. In 2014 there were 9,834 such students.

Year	HSC candidature	Students rece	eiving an ATAR % 79.1 79.2 78.8	
		Number	%	
2010	68,536	54,221	79.1	
2011	69,309	54,897	79.2	
2012	69,638	54,847	78.8	
2013	70,686	54,642	77.3	
2014	71,706	55,482	77.4	

#### Table 4.1 Proportion of students receiving an ATAR: 2010–2014

### 4.3 Number of units of ATAR courses completed

The pattern in 2014 was similar to that observed in 2013, with 44.6% completing exactly 10 ATAR units and 33.1% completing more than the required minimum number of ATAR units (Table 4.2).

Number of	2011	2012	2013	20	14
units	% %	%	Number		
1	0.2	0.2	0.4	0.4	316
2	4.4	5.7	6.6	7.0	5,019
3	0.4	0.4	0.4	0.5	359
4	3.5	4.3	4.6	5.0	3,608
5	0.2	0.1	0.1	0.2	110
6	5.6	5.1	5.5	5.3	3,801
7	0.2	0.2	0.2	0.2	126
8	5.5	4.5	4.2	3.5	2,497
9	0.3	0.3	0.2	0.2	159
10	45.2	45.1	44.2	44.6	32,001
11	18.3	18.2	17.9	17.9	12,819
12	14.1	13.9	13.7	13.3	9,539
13	1.7	1.6	1.5	1.5	1,092
14	0.4	0.3	0.3	0.3	215
15+	0.1	0.1	0.1	0.1	45
HSC cohort	69,309	69,638	70,686		71,706

Table 4.2 Percentage of students completing specified numbers of units<sup>1</sup> of ATAR courses: 2011–2014

<sup>1</sup> The units include current year units and units accumulated in previous years.

### 4.4 Course numbers – Table AI

Table A1 in the Appendix provides, for each course, the size of the candidature, the number who received an HSC in 2014, the number who received an ATAR in 2014, the percentage of females and the maximum ATAR gained by a student enrolled in that course. The table includes students who completed the course in 2014 as well as those who completed the course in previous years and completed at least one ATAR course in 2014. The table excludes courses where there were less than 10 students.

What is clear is that in almost all courses some students gained an ATAR in excess of 95.00, and for the majority of courses the maximum ATAR is higher.

In Table A6 we have included a column showing for each course the maximum ATAR of any student doing the course in any year and including all units from that course in the ATAR calculation. For the vast majority of courses the values for the maximum ATAR in Tables A1 and A6 agree.

The pattern of 'male-dominated' and 'female-dominated' courses was similar to the pattern exhibited previously. Female students were in the majority in languages, creative arts and the humanities, while males were in the majority in technology and computing courses.

A total of 20,790 students enrolled in at least one VET course, of which 14,451 students enrolled in a VET examination course. The proportion taking a VET examination course (69.5%) is lower than 2013 (71.1%).

Overall, 77.4% of the 2014 HSC cohort received ATARs, but the percentage varied across courses, from 50.2% to 100% for Category A courses with candidatures exceeding 100. For students enrolled in any VET courses the overall figure was 53.3% but was higher, 75.8%, for students enrolled in VET examination courses.

### 4.5 Distributions of HSC marks – Table A2

Table A2 in the Appendix shows the distributions of HSC marks in 2014. For each course the percentage of students in Bands 2 to 6 are given, together with the median HSC mark and the Band in which the median lies. Data are not provided for courses with less than 10 students.

Since the introduction of standards referenced reporting in 2001, marks reported to students have not been constrained to a set distribution. Students demonstrating the highest level of achievement in a 2-unit course are placed in Band 6 and receive HSC marks of 90 and above. The data show clearly that patterns of HSC marks vary across courses.

There are few students in Band 1. For most 2-unit courses the median HSC mark lies in Band 4.

Comparison of Table A2 with the corresponding table in 2013 shows that distribution of HSC marks has changed for some courses (see Section 5.1).

### 4.6 Descriptive statistics of HSC and scaled marks – Table A3

Table A3 in the Appendix presents, for each course, descriptive statistics and the 99th, 90th, 75th, 50th and 25th percentiles for HSC and scaled marks. Data are not provided for courses with less than 10 students. Percentiles are not included for courses with less than 40 students.

Although HSC marks are not used as the basis for scaling, they are shown in Table A3 because raw marks are not released to students or teachers and hence cannot be presented in this report. Scaled marks are generally lower than HSC marks: few students receive HSC marks less than 25 (on a one-unit basis) whereas the average scaled mark for the total HSC candidature is approximately 25.

In the table, marks are shown on a one-unit basis, so the range is 0 to 50. The percentiles in a course are based on all students completing that course in 2014 irrespective of whether they were eligible for an ATAR or not.

When reading the table it must be remembered that an HSC mark indicates a standard reached whereas a scaled mark indicates a student's position in the course candidature if all students had completed that course. Because HSC marks and scaled marks serve different purposes, comparing HSC and scaled marks is of little value, and can lead to misinterpretations that may affect student choices of courses to study.

#### Table A3 should not be used as a simple HSC to scaled mark conversion table for reasons explained below.

The Board reports HSC marks rounded to the nearest integer whereas raw marks are calculated to one decimal place. The Board aligns the raw marks to bands that best describe the standards that the students achieve. This can compress a range of raw marks to a smaller number of HSC marks. For example, all Band E4 performances in an Extension course (except for Mathematics Extension 2) are allocated one of the six integer grades 45.0 to 50.0. Thus after aligning and rounding, for each HSC mark there can be a range of raw marks and hence a range of scaled marks. There is, in general, no unique scaled mark for an HSC mark.

A given HSC mark often corresponds to a range of raw and scaled marks and hence to a range of percentiles. Table A3 gives the HSC mark at the specified percentile. Not all students with that HSC mark will be at that percentile when the raw marks are considered. For example, in History Extension the HSC mark at the 90th percentile was 46.0. Students with a History Extension HSC mark of 46.0 in fact corresponded to the scaled mark percentile range 81.4 to 91.9.

The scaled marks reported in Table A3 are the scaled marks at the specified percentiles. The 90th percentile of the scaled mark distribution in History Extension was 42.1 but there was a range of scaled marks achieved by those with an HSC mark of 46.0.

Looking at Chinese Background Speakers in Table A3 we see that the maximum mark and the 99th percentile of the HSC distribution are both 46.5 whereas the scaled marks at the corresponding percentiles are 49.1 and 46.8. This illustrates that there is not a unique scaled mark corresponding to a given HSC mark.

The primary purpose of Table A3 is to show the relativities between courses. For example, Table 4.3 shows the scaled marks corresponding to the 90th and 50th percentiles for English Advanced, Tourism & Events Exam and Hospitality Exam.

Course	Scaled	Scaled mark for			
Course	mean	P <sub>90</sub>	P <sub>50</sub>		
English Advanced	32.0	41.7	32.9		
Hospitality Exam	19.4	32.9	18.8		
Tourism & Events Exam	19.6	32.9	19.6		

#### Table 4.3 Scaled marks for selected percentiles

Tourism & Events Exam and Hospitality Exam have similar scaled means and the same scaled mark corresponding to the 90th percentile. English Advanced has a higher scaled mean and higher scaled marks at corresponding percentiles. The table shows that the students who are at the 90th percentile of the Tourism & Events Exam and Hospitality Exam candidatures have the same scaled marks for those courses as the middle candidate in English Advanced.

### 4.7 Distribution of ATARs – Table A7

Table A7 in the Appendix shows the distribution of ATARs. ATARs are **not** evenly distributed. For most ATARs the number of students on that ATAR lies between 20 and 50. The number of students on an ATAR is less for lower ATARs.

An ATAR of 99.00 does **not** represent the top 1% of the ATAR cohort; 1.7% of the 2014 ATAR cohort actually gained an ATAR of 99.00 or above. It does, however, represent the level of achievement necessary to be in the top 1% of the 2009 Year 7 cohort if all those students continued to Year 12 and had been eligible for an ATAR in 2014. From Table 4.4 we see that in 2014, 16.5% of the ATAR-eligible students received an ATAR of 90.00 or above and 32.8% gained an ATAR of 80.00 and above.

In 2014, 47 students received the top ATAR of 99.95: 33 males and 14 females, from a mix of government and independent schools.

Table 4.5 shows the median ATAR and the median ATAR for male and female candidates for the years 2010-2014.

ATAR	2010 %	2011 %	2012 %	2013 %	2014 %
99.00	1.7	1.7	1.7	1.7	1.7
95.00	8.6	8.5	8.5	8.4	8.3
90.00	17.2	16.8	17.0	16.7	16.5
80.00	33.9	33.3	33.5	33.1	32.8
70.00	49.7	48.9	49.3	48.9	48.4
60.00	64.0	63.2	63.8	63.3	63.0
50.00	76.1	75.5	76.3	75.9	75.8

Table 4.4 Percentage of ATAR students receiving specific ATARs and above: 2010–2014

#### Table 4.5 Median ATAR: 2010-2014

Year	Median ATAR all students	Median ATAR female	Median ATAR male
2010	69.80	71.80	67.40
2011	69.25	71.10	67.00
2012	69.55	71.35	67.55
2013	69.20	71.00	67.00
2014	68.95	70.30	67.20

# 4.8 ATAR percentiles and relationship between ATAR and aggregates – Tables A8, A9

Table A8 in the Appendix shows the ATAR corresponding to selected ATAR-eligible percentiles. For example, 10% of the ATAR cohort in 2014 received an ATAR of 93.95 or above.

Each ATAR corresponds to a range of aggregates and the figures provided in Table A9 in the Appendix show the minimum aggregate corresponding to selected ATARs.

### 4.9 Gender differences

As in previous years, female students outperformed male students in the majority of courses and had a higher median ATAR. The percentages of students receiving ATARs on or above specified values who were female are given in Table 4.6.

ATAR	2010 % female	2011 % female	2012 % female	2013 % female	2014 % female
99.00	49.7	47.1	50.1	50.3	46.5
98.00	51.9	50.9	52.8	52.0	48.3
95.00	54.5	53.4	54.9	54.0	51.3
90.00	56.0	55.9	55.7	55.8	53.8
80.00	56.4	56.7	56.3	56.9	55.2
70.00	56.0	56.4	55.9	56.6	55.4
60.00	55.5	55.9	55.2	56.0	55.2
50.00	54.8	55.3	54.6	55.2	54.7
40.00	54.2	54.7	54.0	54.5	54.2
30.00	53.6	54.2	53.6	54.1	53.7
Total cohort	52.8	53.4	53.0	53.5	53.1

 
 Table 4.6
 Percentage of students receiving ATARs on or above specified values who were female: 2010–2014

Figure 4.1 shows the percentage of students on each ATAR who were female. For this graph the ATARs have been truncated, so that an ATAR of 90, for example, includes ATARs from 90.00 to 90.95. Overall, 53.1% of the ATAR cohort was female, which is represented by the horizontal line on the graph. The graph shows clearly that there were proportionally more females on ATARs above 70.00 than males.



Figure 4.1 Percentage of students on each ATAR who were female

### 4.10 University offers

UAC makes several rounds of offers from September to the end of February. In this report *offer* refers to offers made in any of those rounds. It does not include offers made by UAC in courses that are not bachelor degrees, or do not start in traditional semester 1, or are domestic fee-paying courses.

Of the 55,482 students who received an ATAR in 2014, 80.4% applied through UAC for a university course. Of the domestic (local) applicants 81.8% were made at least one offer of a place. Tables 4.7 and 4.8 provide a breakdown of applicants and offers by ATAR band.

ATAD bond	Total number	Appli	cants	
ATAK Dahu	of students		Percentage <sup>1</sup>	
90.00-99.95	9,172	9,062	98.8	
80.00-89.95	9,001	8,687	96.5	
70.00-79.95	8,694	8,027	92.3	
60.00-69.95	8,096	6,995	86.4	
50.00-59.95	7,069	5,297	74.9	
Below 50.00	13,450	6,524	48.5	
Total	55,482	44,592	80.4	

#### Table 4.7 Applicants for university places by ATAR – domestic and international

<sup>1</sup>These are percentages of the total number of students in the given ATAR band.

Not all the applicants have been made an offer solely on the basis of their ATARs. For some programs alternative criteria have been used, while for other programs students' ATARs have been supplemented by additional criteria.

ATAP bond	Number of	Off	ers
ATAR Danu	applicants	Number	Percentage <sup>2</sup>
90.00-99.95	8,871	8,839	99.6
80.00-89.95	8,540	8,422	98.6
70.00-79.95	7,899	7,607	96.3
60.00-69.95	6,868	6,282	91.5
50.00-59.95	5,185	3,540	68.3
Below 50.00	6,314	1,059	16.8
Total	43,677	35,749	81.8

Table 4.8 Offers of university places by ATAR – domestic only

 $^{\rm 2}$  These are percentages of the number of applicants in the given ATAR band.

# 5 Trends and other issues

### 5.1 Variation in patterns of HSC marks – Tables A4, A5

As noted in Chapter 3, the scaling process uses the raw marks not the HSC marks that the Board uses to report student achievement. Further, the raw marks for each course undergo an initial standardisation to a common mean and standard deviation before the scaling algorithm is implemented. The HSC marks that the Board uses to report student achievement are not used in the scaling process so any variation in the distribution of these marks across courses does not impact on the ATAR calculation.

A common question is whether changes in the pattern of HSC marks from one year to the next affects the pattern of scaled marks and hence the pattern of ATARs. For the reason given above, the answer is no. It is to be expected that the patterns of HSC marks may change from year to year, reflecting differences in student achievement against the published standards in individual courses. In contrast, one would expect to see differences in the patterns of scaled marks only if the overall academic quality of a course candidature changed.

Tables A4 and A5 in the Appendix show the distributions of HSC and scaled marks, respectively, in 2014 and 2013. The marks are on a per-unit basis (0–50) and courses with less than 40 students in either year are not included. Table A4 shows the percentages of each course candidature with an HSC mark less than 45, 40, 35, 30 and 25 for 2014 and 2013. Table A5 provides similar information for scaled marks. The data show that while the distributions of HSC marks have changed for some courses, the distributions of scaled marks were generally the same.

Modern History is an example of a course where the candidature was almost the same as in 2013 but there is a change in the distribution of HSC marks (Table 5.1). The distributions of scaled marks in the two years were, however, similar.

Table 5.1	Distributions of HSC and scaled marks for Modern Histor	v: 2013 and 2014	. on a 1-unit basis
	Distributions of need and source marks for modern mistor	, EVEC UNU EVET	$i$ on $a \pm anne babis$

Mark	Veer	Envolvent	Percentage of students with mark less than:						
	rear	Enroiment	45	40	35	30	25		
HSC mark	2014	10,306	91.3	57.4	24.7	9.9	4.2		
	2013	10,447	89.2	52.6	23.0	8.9	3.5		
Scaled mark	2014	10,306	98.8	90.3	74.4	56.1	39.5		
	2013	10,447	98.8	90.6	74.1	55.1	39.1		

Taken together, the data indicate that the 2014 candidature in Modern History performed worse than the corresponding cohort in 2013 in terms of Modern History. However their overall performance as judged by their scaled marks is very similar.

### 5.2 Distributions of English and Mathematics marks: 2011–2014

Because all students study English and most study Mathematics, comparative data is shown for English and Mathematics courses for the four years 2011 to 2014. Table 5.4 shows the distributions of HSC marks and Table 5.5 shows the distributions of scaled marks.

There is a continuing decline in the number of students completing ESL and English Extension 1 and English Extension 2 that has persisted over the past 5 years. By comparison the number of students completing the non-ATAR course English Studies is growing. In 2014 there were 5,781 candidates who completed English Studies. These students were not ATAR eligible.

There were 1,055 fewer students taking the new Mathematics General 2 course than took the General Mathematics course in 2013. Even with such a large drop in candidature there was very little change in the scaled mean between the two years. In 2014, 15.8% of ATAR-eligible students did not complete a mathematics course and 23.5% of those awarded an HSC did not include a Board Developed mathematics course in their Year 12 HSC subjects.

When considering the English marks, recall English Standard and English Advanced are scaled as a single group.

- In 2-unit English, all students complete a common paper (Paper 1) which counts for 40% of the total mark. Advanced and Standard students then complete separate papers that count for 60% of the total mark.
- The Board uses Paper 1 to place the marks of the separate Standard and Advanced papers on the same scale so that a total (raw) examination mark can be calculated for 2-unit English. The marks for Standard and Advanced students are deemed to be on the same scale.
- The Board moderates school assessments using these raw examination marks.
- The raw HSC marks which are used for scaling are then calculated.
- The raw HSC marks for the English Standard and Advanced students are combined and scaled as a single course. A raw HSC mark yields the same scaled mark for Standard and Advanced students.
- The Board aligns the raw examination marks against standards separately for Standard and Advanced students. As a result, Advanced students on a given raw mark may receive a different aligned mark than Standard students on the same raw mark. Consequently an aligned HSC mark may correspond to a slightly different range of scaled marks for Standard and Advanced students.

By contrast, the courses Mathematics General 2 and Mathematics are distinct 2-unit courses. They have no assessment components in common and so they are scaled as separate courses. The performance band information for 2-unit only students on the Mathematics course, corresponding to Table A2, is given in Table 5.2, and the information captured in Table A3 for other courses is provided in Table 5.3 for this group of candidates.

#### Table 5.2 Distributions of HSC marks for Mathematics 2-unit only candidates

Course	Number	Median	Median	Percen	tage of stu	idents in P	erformanc	e Band
	Number	HSC mark	band	6	5	4	3	2
Mathematics 2-unit only	11,067	77	4	10	28	35	14	7

Table 5.3	Distributions of HSC and scaled marks for Mathematics 2-unit only	/ candidates

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Mathematics 2-unit only	11,067	HSC	37.3	6.9	50.0	48.5	45.0	42.0	38.5	34.5
		scaled	27.9	9.7	50.0	46.2	40.0	35.0	28.8	21.6

	Voor	Enrolmont	Percenta	ISC mark I	less than:		
	rear	Enroiment	45	40	35	30	25
English Standard	2014	31,483	99.7	91.8	56.5	14.3	2.8
	2013	31,495	99.6	93.1	65.8	21.0	4.5
	2012	31,803	99.5	84.2	48.3	21.5	3.1
	2011	34,384	99.8	91.1	60.9	27.4	6.9
English Advanced	2014	26,729	85.3	40.6	8.4	0.8	0.2
	2013	27,007	88.0	46.9	13.9	1.5	0.2
	2012	27,217	87.4	45.9	11.2	0.9	0.1
	2011	27,108	86.7	41.8	11.7	1.7	0.2
English Extension 1	2014	4,848	69.4	29.3	6.8	1.1	0.3
	2013	5,007	75.3	34.6	11.5	3.2	0.8
	2012	5,265	75.0	35.4	12.7	3.2	0.8
	2011	5,327	73.2	38.4	15.8	4.5	1.1
English Extension 2	2014	1,776	76.8	49.2	22.5	6.8	1.7
	2013	1,907	77.3	47.7	22.0	7.4	2.4
	2012	2,126	78.1	50.0	21.4	6.9	1.7
	2011	2,187	76.5	45.5	15.9	3.9	0.8
ESL	2014	2,291	95.5	71.4	33.8	10.4	2.1
	2013	2,410	97.4	76.6	40.2	15.7	4.1
	2012	2,513	96.8	75.1	35.0	10.6	3.5
	2011	2,869	94.2	67.4	30.6	7.9	1.3
Mathematics General 2	2014	31,321	94.5	74.7	48.7	24.0	6.4
	2013	32,376	94.0	78.8	57.4	23.7	7.9
	2012	31,702	94.4	77.7	48.6	19.7	5.5
	2011	31,631	92.9	75.5	49.6	19.6	6.3
Mathematics	2014	16,693	78.2	46.1	18.3	8.5	3.5
	2013	16,463	81.5	50.5	23.1	7.3	1.9
	2012	16,700	81.8	47.4	20.7	9.2	3.3
	2011	16,564	81.6	48.6	21.2	9.0	4.4
Mathematics Extension 1	2014	9,022	69.6	36.8	15.4	5.8	1.9
	2013	8,839	67.2	36.9	16.3	6.5	2.0
	2012	8,925	64.4	35.1	14.9	5.5	1.7
	2011	8,823	64.0	35.5	15.4	5.8	2.2
Mathematics Extension 2	2014	3,371	68.5	35.2	13.5	5.0	1.3
	2013	3,198	66.0	33.8	12.8	4.3	1.6
	2012	3,454	61.9	30.7	11.5	4.2	1.2
	2011	3,439	60.7	26.9	8.2	3.1	1.4

#### Table 5.4 Distributions of HSC marks for English and Mathematics courses: 2011-2014

	Veer	En velve evet	Percenta	age of sti	idents with scaled mark less than:				
	rear	Enroiment	45	40	35	30	25	20	
English Standard	2014	31,483	99.9	99.6	97.2	90.0	75.9	55.8	
	2013	31,495	99.9	99.3	96.5	89.6	76.0	55.8	
	2012	31,803	99.9	99.3	96.5	89.7	77.3	57.3	
	2011	34,384	99.9	99.5	97.4	91.6	79.3	59.9	
English Advanced	2014	26,729	97.6	83.4	60.3	37.1	19.2	8.1	
	2013	27,007	97.5	83.1	60.5	37.2	20.6	9.3	
	2012	27,217	97.8	83.3	60.8	39.2	21.8	9.2	
	2011	27,108	96.3	80.5	60.5	40.0	21.1	8.8	
English Extension 1	2014	4,848	92.8	67.1	38.3	17.4	6.1	1.9	
	2013	5,007	97.4	77.1	42.7	16.4	5.2	1.8	
	2012	5,265	96.9	74.6	41.1	17.8	6.6	2.4	
	2011	5,327	94.2	69.9	37.3	16.7	6.4	2.3	
English Extension 2	2014	1,776	90.0	68.8	41.6	20.0	8.2	2.2	
	2013	1,907	95.5	76.5	46.0	20.2	6.9	1.9	
	2012	2,126	94.7	75.0	45.3	18.3	5.4	1.0	
	2011	2,187	92.4	71.3	44.5	18.4	5.3	1.5	
ESL	2014	2,291	98.3	93.6	85.0	73.9	59.7	44.8	
	2013	2,410	98.8	94.4	85.0	73.7	60.0	46.1	
	2012	2,513	98.5	93.5	85.1	72.7	59.3	44.9	
	2011	2,869	98.8	94.1	85.7	73.5	60.3	46.5	
Mathematics General 2	2014	31,321	99.9	97.5	88.4	75.4	60.9	45.6	
	2013	32,376	99.9	97.8	89.1	76.1	61.3	46.0	
	2012	31,702	99.9	97.8	89.4	76.7	62.9	47.4	
	2011	31,631	99.9	97.4	89.1	77.4	63.6	47.8	
Mathematics	2014	16,693	95.3	78.4	59.0	40.4	25.3	14.5	
	2013	16,463	98.3	84.4	60.5	38.6	22.7	12.6	
	2012	16,700	96.3	81.3	61.6	41.7	25.8	14.7	
	2011	16,564	96.8	81.9	61.5	41.5	25.1	13.6	
Mathematics Extension 1	2014	9,022	81.6	47.3	21.9	9.3	3.9	1.6	
	2013	8,839	78.2	43.4	21.6	10.4	4.7	1.9	
	2012	8,925	81.3	48.8	24.4	10.4	4.0	1.3	
	2011	8,823	79.5	43.8	20.3	8.8	4.0	1.8	
Mathematics Extension 2	2014	3,371	63.9	18.2	5.6	1.8	0.6	0.3	
	2013	3,198	54.3	15.7	4.8	1.9	0.9	0.3	
	2012	3,454	64.8	19.5	5.8	2.1	0.7	0.2	
	2011	3,439	58.4	16.4	5.1	2.4	1.2	0.5	

 Table 5.5 Distributions of scaled marks for English and Mathematics courses: 2011–2014

### 5.3 Courses that contribute to the ATAR – Table A6

If students complete only 10 units all courses must be counted in the calculation of the ATAR, whereas if students complete more than 10 units at least one unit *will* be omitted. In 2014, 31,804 students out of the 55,482 ATAR-eligible students (57.3%) presented exactly 10 units.

Table A6 in the Appendix provides some information about students who completed *more than 10 units*. Data are not provided for courses with less than 10 students.

For each course:

- The second column shows the total number of students who did the course in any year and received an ATAR in 2014.
- The third column shows the number of these students who completed more than 10 units.
- The fourth column expresses this number as a percentage.
- The fifth column gives the percentage of these students who counted all units of that course towards their ATAR. The percentage is based on the number of students in the course who had completed more than 10 units.
- The final column shows the maximum ATAR of any student doing the course in any year and including all units of that course in the ATAR calculation.

Of the 109 courses listed in Table A6, 72 have 70% or more of their students counting the course. The data also show that, while there are differences in the percentages of students who count a particular course towards their ATARs, there is no evidence of systematic differences across Key Learning Areas.

## 6 Frequently asked questions

In recent years most of the enquiries from students received by the ATAR Enquiry Centre at UAC concerned the relationship between their HSC marks and their ATARs, and the reason why one course contributed to their ATAR and not another. These two major enquiries will be discussed below, followed by a summary of some of the other frequently asked questions.

### 6.1 Why is my ATAR low in comparison to my HSC marks?

The ATAR is a rank, not a mark and so there is no reason why the scores should be close. From Table A2 we can see that the median HSC mark for most 2-unit courses is between 70 and 80. The middle ATAR is 68.95 which is lower than the median score for almost all courses. So for students in the middle of the candidature the ATAR will typically be lower than their average HSC mark.

There is, however, no simple rule to convert HSC marks to ATARs. Courses do not necessarily have the same scaled means from year to year and the pattern of HSC marks varies across courses so that the same HSC mark does not necessarily indicate the same position across courses. The following examples illustrate the complexity of the relationship between HSC marks and ATARs.

#### Example 1

Consider the following two students, Liam and Kellie, whose HSC marks are shown in Table 6.1. These students are middle students (the 50th percentile) in all of their courses. Their average HSC marks per unit are similar, 38.5 and 39.1 respectively, but their ATARs are quite different, 55.25 and 78.90 respectively.

	Liam		
ATAR	Course	HSC mark per course	HSC mark per unit
55.25	Dance	78	39.0
	English Standard	68	34.0
	Music 1	82	41.0
	Society & Culture	78	39.0
	Visual Arts	79	39.5

#### Table 6.1 Two examples of student achievement to show the effect of different scaled means

Kellie				
ATAR	Course	HSC mark per course	HSC mark per unit	
78.90	Economics	78	39.0	
	English Advanced	82	41.0	
	Legal Studies	76	38.0	
	Mathematics	81	40.5	
	Physics	74	37.0	

Both Liam and Kellie are at the 50th percentile in all of their courses so the reason for the difference in their ATARs is the difference in the strength of the competition in the courses they have chosen. The average scaled mean for Liam's courses was 21.8 whereas the average scaled mean for Kellie's courses was 30.3. Kellie has competed against students who have demonstrated higher academic achievement.

#### Example 2

Consider the following two students, James and Amy, whose HSC marks are shown in Table 6.2. Their average HSC marks per unit are similar, 39.4 and 38.3 respectively, but their ATARs are quite different, 65.00 and 75.00 respectively.

	James		
ATAR	Course	HSC mark per course	HSC mark per unit
65.00	Business Studies	82	41.0
	English Standard	74	37.0
	Mathematics General 2	74	37.0
	Music 1	85	42.5
	Senior Science	79	39.5

Table 6.2 Two examples of student achievement to show the effect of different scaled m
----------------------------------------------------------------------------------------

	Amy		
ATAR	Course	HSC mark per course	HSC mark per unit
75.00	Biology	76	38.0
	Chemistry	70	35.0
	English Advanced	84	42.0
	Mathematics	73	36.5
	French Continuers	80	40.0

Amy has an ATAR that is almost the same as her average HSC course score (76.6) whereas James's ATAR is much lower than his average HSC course score (78.8). In fact his average HSC score is higher than Amy's. If we look at Table A3 the average of the scaled means of the courses taken by James is 20.9 whereas for the average scaled mean for the courses taken by Amy is 31.2.

#### Example 3

Consider the following two students who completed the same courses. The first student, Fred, receives an HSC mark of 35.0 per unit in each course, while the second student, Laura, receives an HSC mark of 40.0 per unit in each course (Table 6.3).

Table 6.3	Two examples	of student	achievement:	Fred and Laura
-----------	--------------	------------	--------------	----------------

	F	red	Laura		
Course	HSC mark per unit	Percentile	HSC mark per unit	Percentile	
Biology	35.0	41	40.0	75	
Business Studies	35.0	35	40.0	66	
English Advanced	35.0	10	40.0	45	
Mathematics	35.0	20	40.0	49	
Modern History	35.0	27	40.0	62	
Visual Arts	35.0	17	40.0	56	
ATAR	5	5.95	79	9.45	

Their HSC marks per unit in each course differ by only 5, yet their ATARs differ by 23.50. Laura's ATAR is similar to her HSC course marks (80 per course) while Fred's ATAR is much lower than his HSC course marks (70 per course).

The reason for the large difference in the ATARs can be found in the differences in the percentiles shown in Table 6.3. The percentiles are much higher for Laura than for Fred. Given these large differences, it is not surprising that their ATARs are very different.

The courses and HSC marks shown for Fred and Laura are the same as in 2013. While their HSC marks are the same the percentiles (their positions in their courses) have changed because of the changes in the distributions of HSC marks, so their ATARs are different. Table 6.4 presents the ATARs for 2009 to 2014.

Year	Fred	Laura
2009	57.80	81.20
2010	57.05	80.15
2011	58.20	79.80
2012	57.45	79.65
2013	57.55	80.00
2014	55.95	79.45

#### Table 6.4 ATARs for Fred and Laura: 2009–2014

#### The ATAR is about position, whereas HSC marks indicate levels of achievement in individual courses.

# 6.2 Why does this course contribute to my ATAR when another course where I received a higher mark does not count?

As in previous years, this question arose after the results were released because each student's ATAR Advice Notice shows which units contribute to their ATAR. The question is not always easy to answer, especially as students are only aware of their HSC marks, which provide little information as to their rankings in their courses.

The question can often be answered by reference to data on the distributions of HSC and scaled marks in Table A3 in the Appendix. Some examples are presented to illustrate the principles involved.

The examples illustrate the general principle that a student's position in their course **and** the scaled means and standard deviations of their courses are **all** important in determining which of their courses contribute towards their ATAR.

Also it must be remembered that a given HSC mark usually corresponds to a range of raw and scaled marks.

#### Example 1 - scaled means

The first example (Table 6.5) shows a set of HSC and scaled marks corresponding to results at the 90th percentile of the various course distributions.

				P <sub>90</sub>	
Course	Number	Scaled mean	Scaled SD	HSC mark per unit	Scaled mark
Ancient History	11,198	24.4	10.7	44.5	38.6
Biology	17,138	26.6	9.9	43.5	39.2
<b>Business Studies</b>	15,991	23.8	10.7	44.5	38.2
Society and Culture	4,398	23.5	10.3	45.5	37.7
Physics	9,598	30.5	9.6	44.5	42.0

#### Table 6.5 HSC and scaled marks – example 1

These HSC marks are similar and each is at the 90th percentile of a large course with comparable standard deviations. Since the position within the course candidature is the same for each course the scaled mark will depend on the academic quality of the candidature of the course concerned. The highest scaled mark is for Physics, which has the highest scaled mean.

A student in Biology with an HSC mark of 43.5 can receive a higher scaled mark than a student in Ancient History or Business Studies with an HSC mark of 44.5 due to the differences in the strength of the competition reflected in the scaled means.

Notice also that the course with the highest HSC mark, Society and Culture, has the lowest scaled mark.

The HSC mark on its own does not give a clear indication of the contribution a course makes towards a student's aggregate.

#### Example 2 – position

Consider students with HSC marks of 47.0 per unit in Geography and German Continuers. The student in Geography is at the 99th percentile and gains a scaled mark of 45.7 whereas the student in German Continuers is at the 90th percentile and gets a scaled mark of 43.6. Therefore, even though the scaled mean for German Continuers, 33.0, is much higher than the scaled mean for Geography, 25.1, the difference in position compensates for this and the Geography student gets the higher scaled mark.

	Scaled mean	Scaled SD	Percentile	HSC mark per unit	Scaled mark
Geography	25.1	11.0	P <sub>99</sub>	47.0	45.7
German Continuers	33.0	9.0	P <sub>90</sub>	47.0	43.6

#### Table 6.6 HSC and scaled marks – example 2

#### Example 3 – standard deviations

In some situations, particularly in courses with smaller candidatures, the difference in the distribution spread is also a factor in deciding which course contributes towards the ATAR.

			P <sub>90</sub>		
Course	Scaled mean	Scaled SD	HSC mark per unit	Scaled mark	
Music 1	21.3	10.6	46.0	35.9	
Arabic Extension 1	25.5	4.8	46.0	31.7	

#### Table 6.7 HSC and scaled marks – example 3

Consider students at the 90th percentile of Music 1 with HSC mark 46.0 per unit and scaled mark of 35.9 per unit and at the 90th percentile of Arabic Extension with HSC mark of 46.0 and scaled mark of 31.7. Arabic Extension has scaled mean of 25.5 whereas Music 1 has scaled mean 21.3.

The course with the lower scaled mean has the higher scaled mark corresponding to the HSC mark of 46.0 even though the position is the same in both courses. The reason the scaled marks differ is the spread in the distribution as measured by the standard deviation (SD). Arabic Extension has SD 4.8 but Music 1 has SD 10.6. Music 1 has a candidature with more varied academic ability than Arabic Extension.

#### Example 4 - raw vs HSC marks

As noted in Section 4.6 there is not necessarily a unique scaled mark for each HSC mark. From Table A3, by focusing on the maximum mark and the 99th and 90th percentiles, we see that candidates receiving the top HSC mark of 50 in Music Extension received scaled marks from 50.0 to 48.3. The top HSC mark in a course does not necessarily reflect the top raw mark in a course and so a candidate with HSC mark of 50 may not receive the top scaled mark.

The pattern of several scaled marks corresponding to a given HSC mark can occur across the distribution, not just at the top of the range.

### 6.3 Other frequently asked questions

#### Does the school I attend matter?

No. The school attended does not feature in the ATAR calculation. The ATAR calculation is based only on marks provided by the Board; no other information is used.

#### Does my postcode matter?

No.

#### Are certain courses always 'scaled down'?

No. Scaling is carried out afresh each year: if the quality of the candidature changes, the scaled mean will also change.

#### Is it true that if I study this course I can't get a high ATAR?

No. As Table A1 in the Appendix shows, there are students in every course who achieve high ATARs.

#### What impact did the variation in patterns of HSC marks have on the ATAR calculations?

None. It is the raw HSC marks rather than the aligned HSC marks that are scaled. The fact that the percentage of students who are placed in Performance Band 6 differs across courses has no effect on the calculation of the ATAR.

#### Why can't I use my HSC marks to check the calculation of my ATAR?

There are two reasons. The first is the ATAR is a rank that indicates your position in relation to other students, it is not an average mark. Secondly raw marks are used in the calculation of the ATAR not the aligned HSC marks.

#### Can I find out what my scaled marks are?

No. Scaled marks are not reported to students. They are determined during an interim phase in the ATAR calculation.

#### I have similar HSC marks to my friend, but we don't have similar ATARs. Why not?

Your ATARs would be similar if your courses were the same.

#### Which course should I study?

Do not choose courses on the basis of what you believe are the likely effects of scaling. Choice of which courses to study should be determined only by your interests, your demonstrated abilities and the value of courses for your future career plans. The scaling process is designed to allow students to choose according to these principles and not, as far as university selection is concerned, be disadvantaged by their choice. It treats all students on their merits.

#### Do I get a better ATAR if I study more units?

This is a common question. While the data show that students who study more units tend to gain higher ATARs, determining causality is difficult. The relationship between number of units studied and ATAR might result from personal attributes including interest, motivation, effort and time management. You cannot assume that simply by studying more units your ATAR will be increased.

#### What happens if I repeat a course?

If a course is repeated only the last satisfactory attempt is used towards the calculation of the ATAR. Your aggregate will be re-calculated using your new mark and your previous marks. Your aggregate may increase, remain the same or decrease; it depends on your new mark. Since you are being compared with a different cohort your ATAR may increase, remain the same or decrease.

#### What happens if I accumulate the HSC?

Students who accumulate courses towards their HSC have their scaled marks calculated the year they complete the courses.

#### What happens if I already have an ATAR and add a new ATAR course the following year?

Your aggregate will be re-calculated using your new course and your previous courses. It may increase or stay the same but it will not go down. Since you are being compared with a different cohort your ATAR may increase, remain the same or decrease.

#### Which ATAR is used for selection purposes?

Institutions use your latest ATAR for selection purposes. This could be better or worse than a previous ATAR.

#### If I'm eligible to get bonus points, does my ATAR change?

No. Bonus points do not change your ATAR. They change your selection rank for a particular preference or course.

#### If bonus points don't increase my ATAR, then how do they work?

Universities allocate bonus points to students for different reasons. Examples include for strong performance in specific HSC courses, for students who live in or attend school in an area defined by the university and for students who have applied for consideration through Educational Access Schemes (EAS).

As the bonus points schemes for each university, and often each course at the same university, are different, your selection rank can be different for each course you list in your course preferences. For most Year 12 applicants, their selection rank for each preference is their ATAR. However if a university allocates bonus points to you for a particular course then your selection rank for that preference is your ATAR + bonus points.

# 7 Appendix

The following courses are not included in Tables A2 to A5 in the Appendix as they had less than 10 students in 2014:

- Arabic Beginners
- Dutch
- Hungarian
- Heritage Indonesian
- Malay Background Speakers
- Maltese
- Ukrainian

Some other courses do not appear in all tables if they have less than the minimum number of candidates required for a particular table.

Table A1	Course numbers – gender, ATAR eligibility and maximum ATAR by course Excludes courses with less than 10 students.
Table A2	Distributions of HSC marks by course Excludes courses with less than 10 students.
Table A3	Descriptive statistics and selected percentiles for HSC marks and scaled marks by course Excludes courses with less than 10 students or less than 4 ATAR-eligible students and no percentile data are given for courses with less than 40 students.
Table A4	Distributions of HSC marks by course: 2013–2014 Excludes courses with less than 40 students in either year.
Table A5	Distributions of scaled marks by course: 2013–2014 Excludes courses with less than 40 students in either year.
Table A6	Courses that contribute to the ATAR Excludes courses with less than 10 students.
Table A7	ATAR distribution
Table A8	ATAR percentiles: 2010-2014
Table A9	Relationship between the ATAR and aggregates: 2010–2014

#### Table A1 Course numbers – gender, ATAR eligibility and maximum ATAR by course

- Notes: (i) The **Number all** column includes students who have completed the course in 2014 or in a previous year (and who have done at least one ATAR course in 2014).
  - (ii) The **Number HSC** column shows the number of students who completed the course in 2014 or in a previous year and received an HSC award in 2014.
  - (iii) The **Number ATAR** column shows the number of students who completed the course in 2014 or in a previous year and who were eligible for an ATAR in 2014.
  - (iv) The % Female column shows the percentage of students in the course who were female.
  - (v) The % HSC column shows the percentage of students in the course who received an HSC award in 2014.
  - (vi) The % ATAR eligible column shows the percentage of students in the course who were eligible for an ATAR in 2014.
  - (vii) The Maximum ATAR column shows the maximum ATAR achieved by a student doing the course.
  - (viii) This table excludes courses with less than 10 students.

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR eligible	Maximun ATAR
Aboriginal Studies	440	383	221	72.7	87.0	50.2	99.60
Agriculture	1,441	1,333	1,003	52.0	92.5	69.6	99.95
Ancient History	11,410	11,143	10,367	57.1	97.7	90.9	99.95
Biology	17,444	16,972	16,465	61.2	97.3	94.4	99.95
Business Studies	16,266	15,835	14,764	47.5	97.4	90.8	99.95
Chemistry	11,396	11,117	11,063	44.8	97.6	97.1	99.95
Community & Family Studies	7,766	7,539	6,006	93.3	97.1	77.3	99.45
Dance	951	904	786	93.7	95.1	82.6	98.95
Design & Technology	3,166	3,034	2,633	42.4	95.8	83.2	99.35
Drama	4,810	4,663	4,191	69.3	96.9	87.1	99.90
Earth & Environmental Science	1,519	1,463	1,388	44.5	96.3	91.4	99.80
Economics	5,190	5,107	5,079	36.4	98.4	97.9	99.95
Engineering Studies	2,070	2,030	1,949	5.2	98.1	94.2	99.90
English Standard	31,937	30,920	26,900	49.3	96.8	84.2	99.80
English Advanced	27,017	26,678	26,479	57.9	98.7	98.0	99.95
English Extension 1	4,886	4,850	4,840	65.9	99.3	99.1	99.95
English Extension 2	1,787	1,781	1,773	68.4	99.7	99.2	99.95
ESL	2,329	2,225	2,103	52.8	95.5	90.3	99.95
Food Technology	3,571	3,475	2,745	75.5	97.3	76.9	99.70
Geography	4,482	4,360	4,019	44.4	97.3	89.7	99.95
Industrial Technology	5,435	5,141	3,422	11.5	94.6	63.0	98.00
Information Processes & Technology	3,052	2,802	2,537	21.9	91.8	83.1	99.95
Legal Studies	10,173	9,992	9,549	61.3	98.2	93.9	99.95
Mathematics General 2	31,810	30,978	27,747	51.1	97.4	87.2	99.75
Mathematics	17,165	15,636	15,579	45.9	91.1	90.8	99.95
Mathematics Extension 1	9,301	8,918	8,917	39.9	95.9	95.9	99.95
Mathematics Extension 2	3,414	3,368	3,369	35.7	98.7	98.7	99.95
Modern History	10,454	10,212	9,657	52.7	97.7	92.4	99.95
History Extension	1,937	1,929	1,922	62.1	99.6	99.2	99.95
Music 1	5,100	4,841	4,142	47.4	94.9	81.2	99.90
Music 2	805	748	746	50.7	92.9	92.7	99.95
Music Extension	481	466	466	50.3	96.9	96.9	99.95
PDH&PE	14,631	14,306	13,074	53.4	97.8	89.4	99.90
Physics	9,750	9,611	9,547	21.3	98.6	97.9	99.95
Senior Science	6,382	6,199	5,035	46.6	97.1	78.9	99.75

#### Table A1 Gender, ATAR eligibility and maximum ATAR by course (continued)

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR eligible	Maximun ATAR
Society & Culture	4,485	4,333	4,042	80.5	96.6	90.1	99.95
Software Design & Development	1,781	1,666	1,567	6.9	93.5	88.0	99.95
Studies of Religion I	9,630	9,247	8,949	53.6	96.0	92.9	99.95
Studies of Religion II	5,508	5,375	5,245	65.6	97.6	95.2	99.85
Textiles & Design	1,900	1,837	1,591	98.8	96.7	83.7	99.90
Visual Arts	9,207	8,909	7,651	72.1	96.8	83.1	99.95
Arabic Continuers	219	207	173	63.0	94.5	79.0	95.95
Arabic Extension	67	64	56	67.2	95.5	83.6	92.95
Armenian	36	26	26	77.8	72.2	72.2	97.35
Chinese Beginners	54	54	49	53.7	100.0	90.7	97.70
Chinese Continuers	84	81	81	44.0	96.4	96.4	99.95
Chinese Extension	27	27	27	40.7	100.0	100.0	99.95
Chinese Background Speakers	648	620	611	59.0	95.7	94.3	99.95
Heritage Chinese (Mandarin)	122	121	119	72.1	99.2	97.5	99.80
Classical Greek Continuers	19	19	19	31.6	100.0	100.0	99.95
Classical Greek Extension	13	13	13	23.1	100.0	100.0	99.95
Classical Hebrew Continuers	35	33	33	71.4	94.3	94.3	99.85
Classical Hebrew Extension	16	16	16	75.0	100.0	100.0	99.85
Croatian	15	12	12	60.0	80.0	80.0	92.80
Filipino	13	13	13	84.6	100.0	100.0	84.25
French Beginners	693	681	627	81.8	98.3	90.5	99.75
French Continuers	843	802	799	71.8	95.1	94.8	99.95
French Extension	204	199	199	63.7	97.5	97.5	99.95
German Beginners	69	68	66	78.3	98.6	95.7	99.65
German Continuers	308	290	288	63.3	94.2	93.5	99.95
German Extension	65	63	63	52.3	96.9	96.9	99.95
Hindi	22	17	17	59.1	77.3	77.3	98.75
Indonesian Beginners	43	41	39	55.8	95.3	90.7	99.15
Indonesian Continuers	64	64	63	62.5	100.0	98.4	99.15
Indonesian Extension	13	13	13	46.2	100.0	100.0	97.50
Indonesian Background Speakers	68	68	67	45.6	100.0	98.5	99.30
Italian Beginners	352	345	314	77.3	98.0	89.2	99.65
Italian Continuers	318	295	291	65.4	92.8	91.5	99.85
Italian Extension	67	63	63	58.2	94.0	94.0	99.85
Japanese Beginners	697	674	641	59.5	96.7	92.0	99.75
Japanese Continuers	642	627	624	64.6	97.7	97.2	99.90
Japanese Extension	194	193	193	66.0	99.5	99.5	99.90
Japanese Background Speakers	12	12	12	75.0	100.0	100.0	97.65
Heritage Japanese	18	18	17	55.6	100.0	94.4	91.45
Khmer	18	18	16	44.4	100.0	88.9	89.90
Korean Continuers	13	13	13	84.6	100.0	100.0	99.75
Korean Background Speakers	63	58	58	76.2	92.1	92.1	99.35
Heritage Korean	41	39	38	68.3	95.1	92.7	99.35
Latin Continuers	161	158	158	50.9	98.1	98.1	99.95
Latin Extension	105	104	104	52.4	99.0	99.0	99.95
Macedonian	23	22	22	73.9	95.7	95.7	99.00

#### Table A1 Gender, ATAR eligibility and maximum ATAR by course (continued)

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR eligible	Maximun ATAR
Modern Greek Beginners	47	44	39	44.7	93.6	83.0	96.55
Modern Greek Continuers	110	97	94	67.3	88.2	85.5	98.35
Modern Greek Extension	50	45	43	64.0	90.0	86.0	98.35
Modern Hebrew	62	48	48	71.0	77.4	77.4	99.85
Persian	22	17	14	40.9	77.3	63.6	94.25
Polish	21	21	20	52.4	100.0	95.2	97.15
Portuguese	19	16	16	47.4	84.2	84.2	94.95
Russian	17	15	14	70.6	88.2	82.4	99.30
Serbian	14	14	12	71.4	100.0	85.7	98.95
Spanish Beginners	204	197	186	70.6	96.6	91.2	99.75
Spanish Continuers	172	168	152	63.4	97.7	88.4	98.60
Spanish Extension	51	49	48	70.6	96.1	94.1	98.60
Swedish	20	7	7	85.0	35.0	35.0	94.50
Tamil	62	37	37	66.1	59.7	59.7	99.80
Turkish	49	35	32	63.3	71.4	65.3	97.35
Vietnamese	142	132	126	57.7	93.0	88.7	99.20
Automotive Exam	426	376	141	5.9	88.3	33.1	84.85
Business Services Exam	1,205	1,120	868	79.2	92.9	72.0	97.85
Construction Exam	1,719	1,575	969	1.8	91.6	56.4	97.95
Electrotechnology Exam	330	300	202	1.5	90.9	61.2	99.45
Entertainment Industry Exam	920	897	805	57.6	97.5	87.5	97.05
Financial Services Exam	235	230	221	45.1	97.9	94.0	99.80
Hospitality Exam	5,879	5,489	4779	74.1	93.4	81.3	99.20
Human Services Exam	590	574	509	91.0	97.3	86.3	98.45
Information & Digital Technology Exam	1,116	1,008	865	13.4	90.3	77.5	97.95
Metal & Engineering Exam	830	748	428	3.3	90.1	51.6	90.90
Primary Industries Exam	659	612	386	43.7	92.9	58.6	92.95
Retail Services Exam	1,103	1,008	785	70.7	91.4	71.2	96.20
Tourism & Events Exam	334	330	255	93.7	98.8	76.3	95.10
Total	71,706	65,305	55,482	51.7	91.1	77.4	99.95

#### Table A2 Distributions of HSC marks by course

Notes: (i) The Median HSC mark column shows the median HSC mark per course.

- (ii) The Median Band column indicates the Performance Band in which the median HSC mark lies.
- (iii) The **Percentage of Students in Performance Band** columns show the percentage of a course candidature in each of the Performance Bands 6 to 2. Extension courses show only Bands 4 to 2 as they have four Bands only: E1 to E4.
- (iv) This table excludes courses with less than 10 students.

0	Numera	Median	Median	Percer	tage stud	ents in Pe	erformance	formance Band		
Course	Number	HSC mark	Band	6	5	4	3	2		
Aboriginal Studies	410	67	3	9	11	24	27	18		
Agriculture	1,372	71	4	7	19	31	25	15		
Ancient History	11,198	74	4	9	24	29	22	10		
Biology	17,138	73	4	6	23	34	24	10		
Business Studies	15,991	76	4	9	28	30	21	9		
Chemistry	11,173	78	4	12	35	29	16	5		
Community & Family Studies	7,687	76	4	6	31	34	20	7		
Dance	920	78	4	13	31	33	20	2		
Design & Technology	3,121	76	4	11	26	38	20	4		
Drama	4,753	78	4	13	29	42	14	1		
Earth & Environmental Science	1,494	77	4	6	34	33	18	6		
Economics	5,131	78	4	11	34	28	18	7		
Engineering Studies	2,043	74	4	9	24	31	26	7		
English Standard	31,483	68	3	<1	8	35	42	11		
English Advanced	26,729	82	5	15	45	32	8	1		
English Extension 1	4,848	42	E3			31	63	6		
English Extension 2	1,776	40	E3			23	54	21		
ESL	2,291	74	4	5	24	38	23	8		
Food Technology	3,538	71	4	7	22	26	25	17		
Geography	4,418	78	4	8	36	25	16	9		
Industrial Technology	5,360	72	4	9	20	29	25	12		
Information Processes & Technology	2,756	74	4	7	21	39	21	8		
Legal Studies	10,052	76	4	13	28	26	19	9		
Mathematics General 2	31,321	70	4	6	20	26	25	18		
Mathematics	16,693	81	5	22	32	28	10	5		
Mathematics Extension 1	9,022	42	E3			30	54	13		
Mathematics Extension 2	3,371	84	E3			32	55	12		
Modern History	10,306	78	4	9	34	33	15	6		
History Extension	1,934	40	E3			22	55	20		
Music 1	5,002	82	5	18	42	29	8	2		
Music 2	765	87	5	34	53	12	1			
Music Extension	475	47	E4			75	24	1		
PDH&PE	14,396	74	4	8	22	33	25	9		
Physics	9,598	74	4	9	23	35	24	7		
Senior Science	6,328	76	4	8	29	33	21	7		
Society & Culture	4,398	78	4	13	33	33	16	5		
Software Design & Development	1,719	74	4	7	21	38	25	7		
Studies of Religion I	9,299	39	4	12	37	27	18	5		

#### Table A2 Distributions of HSC marks by course (continued)

<u>^</u>	Number	Median	Median	Percentage students in Performance Band						
Course	Number	HSC mark	Band	6	5	4	3	2		
Studies of Religion II	5,464	78	4	8	36	30	17	6		
Textiles & Design	1,874	77	4	13	28	30	20	6		
Visual Arts	9,071	79	4	11	38	37	12	2		
Arabic Continuers	211	81	5	8	49	21	12	4		
Arabic Extension	63	38	E3			17	57	25		
Armenian	23	86	5	35	48	17				
Chinese Beginners	54	80	5	31	19	15	24	9		
Chinese Continuers	83	83	5	28	40	22	8	2		
Chinese Extension	26	47	E4			88	12			
Chinese Background Speakers	635	83	5	13	56	30	1	<1		
Heritage Chinese (Mandarin)	121	87	5	31	50	12	3	3		
Classical Greek Continuers	19	94	6	79	16	5				
Classical Greek Extension	13	49	E4			92	8			
Classical Hebrew Continuers	35	83	5	34	29	20	11	6		
Classical Hebrew Extension	16	45	E4			56	44			
Croatian	14	82	5	14	43	43				
Filipino	11	91	6	64	27	9				
French Beginners	677	79	4	19	28	27	16	5		
French Continuers	799	85	5	35	31	23	8	2		
French Extension	200	43	E3			40	56	5		
German Beginners	69	86	5	42	19	26	9	4		
German Continuers	277	83	5	30	28	28	10	4		
German Extension	61	43	E3			31	66	3		
Hindi	19	91	6	53	47					
Indonesian Beginners	43	77	4	23	16	28	14	9		
Indonesian Continuers	64	84	5	28	36	31	5			
Indonesian Extension	13	45	E4			62	31	8		
Indonesian Background Speakers	68	74	4	1	18	66	12	3		
Italian Beginners	351	73	4	12	23	23	21	14		
Italian Continuers	298	82	5	22	35	24	12	3		
Italian Extension	67	39	E3			22	57	21		
Japanese Beginners	687	76	4	13	28	26	19	10		
Japanese Continuers	624	82	5	17	41	21	17	3		
Japanese Extension	191	41	E3			29	67	4		
Japanese Background Speakers	11	80	5		55	45				
Heritage Japanese	18	85	5	22	56	17	6			
Khmer	18	82	5		72	28				
Korean Continuers	13	93	6	77	8	15				
Korean Background Speakers	63	81	5	16	35	33	13	3		
Heritage Korean	39	91	6	64	31	3	3			
Latin Continuers	161	89	5	43	31	18	2	5		
Latin Extension	105	45	E4			58	39	2		
Macedonian	22	86	5	32	41	18		9		

#### Table A2 Distributions of HSC marks by course (continued)

0	Number	Median	Median	Percentage students in Performance Band							
Course	Number	mark	Band	6	5	4	3	2			
Modern Greek Beginners	47	86	5	43	19	21	6	2			
Modern Greek Continuers	102	84	5	28	38	30	2	1			
Modern Greek Extension	47	45	E4			55	34	11			
Modern Hebrew	56	91	6	55	41	4					
Persian	21	81	5	24	38	33	5				
Polish	21	91	6	76	14	10					
Portuguese	18	73	4		11	50	28	11			
Russian	17	94	6	65	24	12					
Serbian	14	89	5	50	43	7					
Spanish Beginners	202	76	4	15	22	32	21	9			
Spanish Continuers	169	78	4	11	34	33	14	7			
Spanish Extension	49	40	E3			16	67	16			
Swedish	13	93	6	69	31						
Tamil	23	84	5	17	39	35	9				
Turkish	34	83	5	24	38	26	9	3			
Vietnamese	140	77	4	6	25	49	19	1			
Automotive Exam	415	67	3	2	8	30	42	18			
Business Services Exam	1,141	73	4	2	22	36	26	10			
Construction Exam	1,631	73	4	<1	18	46	31	5			
Electrotechnology Exam	305	71	4	1	10	45	32	12			
Entertainment Industry Exam	911	72	4	3	15	41	31	7			
Financial Services Exam	229	75	4	6	28	37	20	9			
Hospitality Exam	5,559	76	4	5	31	37	23	4			
Human Services Exam	576	73	4	2	15	48	28	7			
Information & Digital Technology Exam	1,015	74	4	2	22	49	19	8			
Metal & Engineering Exam	756	68	3	1	9	35	33	17			
Primary Industries Exam	614	76	4	5	22	51	16	4			
Retail Services Exam	1,024	72	4	<1	18	41	28	11			
Tourism & Events Exam	331	76	4	4	26	48	19	3			

Notes: (i) The  $P_{99}$ ,  $P_{90}$ ,  $P_{75}$ ,  $P_{50}$ ,  $P_{25}$  columns refer to the 99th, 90th, 75th, 50th and 25th percentiles respectively.

(ii) The table excludes courses with less than 10 students and no percentile data are given for courses with less than 40 students.

(iii) This table should not be used as a simple HSC to scaled mark conversion table. For each HSC mark there can be a range of raw marks and therefore a range of scaled marks.

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Aboriginal Studies	410	HSC	33.5	7.8	48.0	48.0	44.0	38.5	33.5	29.0
		scaled	13.2	12.3	43.3	42.9	35.1	20.0	8.5	3.2
Agriculture	1,372	HSC	35.2	6.6	49.0	47.5	43.5	40.0	35.5	31.0
		scaled	19.7	11.6	46.9	44.6	36.3	28.3	18.4	10.1
Ancient History	11,198	HSC	36.1	7.1	49.5	47.5	44.5	41.0	37.0	32.0
		scaled	24.4	10.7	49.9	45.5	38.6	32.4	25.0	16.3
Biology	17,138	HSC	36.0	6.2	49.0	46.5	43.5	40.5	36.5	32.5
		scaled	26.6	9.9	50.0	45.2	39.2	34.3	27.3	19.4
Business Studies	15,991	HSC	37.2	6.0	49.5	47.5	44.5	42.0	38.0	33.0
		scaled	23.8	10.7	49.2	44.4	38.2	32.3	24.1	15.2
Chemistry	11,173	HSC	38.3	6.1	49.5	47.5	45.0	43.0	39.0	35.0
		scaled	31.5	9.7	50.0	46.8	42.9	39.2	33.2	25.1
Community & Family Studies	7,687	HSC	37.4	5.4	50.0	47.0	44.0	41.5	38.0	34.0
		scaled	18.9	10.4	44.4	40.1	33.7	27.0	18.6	10.3
Dance	920	HSC	38.8	5.5	49.5	49.5	45.5	42.5	39.0	35.0
		scaled	22.8	10.8	47.1	46.4	38.4	30.6	21.5	14.0
Design & Technology	3,121	HSC	38.2	5.1	49.5	48.0	45.0	42.0	38.0	35.0
		scaled	21.4	10.6	47.1	44.0	36.3	29.5	20.8	12.7
Drama	4,753	HSC	39.2	4.4	49.5	47.5	45.5	42.5	39.0	36.0
		scaled	23.7	10.4	49.1	45.2	38.3	31.4	23.1	15.8
Earth & Environmental Science	1,494	HSC	37.6	5.6	48.0	46.5	44.0	41.5	38.5	34.5
		scaled	24.1	10.4	48.5	44.3	37.7	31.9	24.8	16.3
Economics	5,131	HSC	38.1	5.9	49.5	47.5	45.0	42.5	39.0	34.5
		scaled	32.2	9.3	50.0	46.5	42.7	39.3	34.1	26.8
Engineering Studies	2,043	HSC	36.8	6.0	49.0	47.5	44.5	41.0	37.0	33.0
		scaled	25.6	9.4	48.2	45.3	38.3	32.6	25.5	18.7
English Standard	31,483	HSC	33.9	4.6	49.5	43.5	39.5	37.0	34.0	31.5
		scaled	19.1	8.0	49.7	38.0	30.0	24.8	18.7	13.1
English Advanced	26,729	HSC	40.5	4.0	49.5	47.5	45.5	43.5	41.0	38.0
		scaled	32.0	8.0	50.0	46.1	41.7	38.1	32.9	26.8
English Extension 1	4,848	HSC	41.6	4.4	50.0	49.0	47.0	45.0	42.0	39.0
		scaled	36.3	6.7	50.0	48.0	44.1	41.3	37.2	32.3
English Extension 2	1,776	HSC	39.1	6.2	50.0	49.0	47.0	44.0	40.0	35.0
		scaled	35.9	7.2	50.0	48.7	45.0	41.5	36.4	31.2
ESL	2,291	HSC	36.6	5.4	48.5	47.0	43.0	40.0	37.0	33.5
		scaled	22.1	11.3	49.4	45.9	37.9	30.4	21.9	12.9
Food Technology	3,538	HSC	35.6	6.4	49.5	47.5	44.0	40.5	35.5	31.0
		scaled	19.6	11.2	46.4	43.3	36.2	28.5	17.9	10.3
Geography	4,418	HSC	37.0	7.0	48.5	47.0	44.5	42.5	39.0	33.0
		scaled	25.1	11.0	50.0	45.7	39.6	33.9	25.9	16.7

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Industrial Technology	5,360	HSC	35.6	7.0	49.5	47.5	44.5	40.5	36.0	31.5
		scaled	16.3	9.7	40.1	37.8	30.9	23.5	15.0	8.4
Information Processes &	2,756	HSC	36.7	5.8	49.0	47.0	44.0	40.5	37.0	33.5
Technology		scaled	21.2	10.9	47.3	43.9	36.2	29.1	20.6	12.6
Legal Studies	10,052	HSC	36.9	7.3	49.5	48.0	45.5	42.5	38.0	32.5
		scaled	25.5	10.7	50.0	45.9	39.9	33.8	26.0	17.4
Mathematics General 2	31,321	HSC	34.6	6.9	49.0	47.0	43.5	40.0	35.0	30.0
		scaled	21.6	10.3	45.8	41.7	35.7	29.9	21.5	13.2
Mathematics	16,693	HSC	39.4	6.8	50.0	49.0	47.0	44.0	40.5	36.5
		scaled	31.2	10.0	50.0	47.3	43.2	39.1	32.7	24.9
Mathematics Extension 1	9,022	HSC	40.6	6.3	50.0	49.5	47.5	45.5	42.0	37.0
		scaled	39.2	6.6	50.0	49.1	46.5	44.0	40.5	35.8
Mathematics Extension 2	3,371	HSC	41.0	5.8	50.0	49.0	47.0	45.5	42.0	38.0
		scaled	43.0	4.4	50.0	49.0	47.3	45.9	43.9	41.1
Modern History	10,306	HSC	37.7	6.3	49.5	47.0	44.5	42.0	39.0	35.0
		scaled	26.6	11.0	50.0	45.3	39.9	35.1	28.2	19.2
History Extension	1,934	HSC	39.2	6.1	49.0	48.0	46.0	44.0	40.0	35.0
		scaled	34.0	6.7	49.2	45.6	42.1	38.8	34.5	30.1
Music 1	5,002	HSC	40.4	4.8	50.0	48.5	46.0	44.0	41.0	37.5
		scaled	21.3	10.6	47.2	43.9	35.9	29.4	20.9	12.7
Music 2	765	HSC	43.3	3.1	49.5	49.0	47.5	45.5	43.5	41.0
		scaled	33.9	7.9	50.0	48.5	44.5	39.6	34.5	28.0
Music Extension	475	HSC	46.2	3.5	50.0	50.0	50.0	49.0	47.0	44.0
		scaled	35.4	9.0	50.0	50.0	48.3	42.8	34.8	28.6
PDH&PE	14,396	HSC	36.6	5.8	49.5	47.0	44.5	41.0	37.0	33.0
		scaled	23.1	10.4	48.3	43.7	37.3	31.1	22.9	14.8
Physics	9,598	HSC	37.0	5.7	49.0	47.0	44.5	41.0	37.0	33.5
		scaled	30.5	9.6	50.0	46.1	42.0	38.1	31.9	23.9
Senior Science	6,328	HSC	37.3	5.8	49.5	47.5	44.0	41.5	38.0	33.5
		scaled	18.8	10.2	43.6	40.4	32.8	26.7	18.2	10.6
Society & Culture	4,398	HSC	38.6	5.6	49.5	48.0	45.5	42.5	39.0	35.5
		scaled	23.5	10.3	48.0	44.8	37.7	31.2	23.3	15.7
Software Design & Development	1,719	HSC	36.8	5.4	49.0	47.5	44.0	40.0	37.0	33.5
		scaled	23.7	10.8	48.3	45.5	38.8	31.9	23.3	15.0
Studies of Religion I	9,299	HSC	38.5	5.4	49.0	48.0	45.0	43.0	39.0	35.0
		scaled	27.6	8.8	48.5	44.6	38.7	34.1	28.1	21.7
Studies of Religion II	5,464	HSC	37.9	6.0	49.0	47.0	44.5	42.0	39.0	34.5
		scaled	27.3	9.9	50.0	45.5	39.6	34.7	28.1	20.6
Textiles & Design	1,874	HSC	38.1	5.8	49.5	48.0	45.5	42.5	38.5	34.0
		scaled	22.6	10.7	48.0	44.5	37.9	30.6	22.1	14.2
Visual Arts	9,071	HSC	39.4	4.4	50.0	47.5	45.0	42.5	39.5	36.5
		scaled	22.3	10.9	48.9	45.1	37.6	30.6	21.5	13.6
Arabic Continuers	211	HSC	37.9	8.4	46.5	46.0	44.5	43.0	40.5	36.0
		scaled	17.5	12.0	45.6	42.6	34.6	26.9	16.8	7.4

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Arabic Extension	63	HSC	38.6	5.0	49.0	49.0	46.0	43.0	38.0	34.0
		scaled	25.5	4.8	40.4	40.4	31.7	29.3	25.4	21.6
Armenian	23	HSC	42.7	3.1	47.0					
		scaled	31.0	11.3	50.0					
Chinese Beginners	54	HSC	39.0	7.5	49.0	49.0	48.5	46.5	39.5	33.0
		scaled	24.4	14.2	50.0	50.0	44.8	37.8	22.7	12.9
Chinese Continuers	83	HSC	40.9	4.6	48.0	48.0	46.0	45.0	41.5	38.0
		scaled	32.4	9.0	50.0	50.0	43.1	39.8	33.1	26.3
Chinese Extension	26	HSC	46.4	2.0	50.0					
		scaled	37.6	5.9	50.0					
Chinese Background Speakers	635	HSC	41.4	3.0	46.5	46.5	45.0	43.5	41.5	39.5
		scaled	22.7	11.1	49.1	46.8	38.7	30.9	21.9	13.5
Heritage Chinese (Mandarin)	121	нѕс	42.4	4.1	48.5	48.5	46.0	45.0	43.5	41.0
		scaled	30.4	9.6	50.0	49.9	40.7	37.0	32.0	25.1
Classical Greek Continuers	19	HSC	46.5	2.8	50.0					
		scaled	40.6	7.2	50.0					
Classical Greek Extension	13	HSC	48.2	1.6	50.0					
		scaled	42.5	6.4	50.0					
Classical Hebrew Continuers	35	HSC	40.9	5.6	49.0					
		scaled	34.5	8.3	50.0					
Classical Hebrew Extension	16	HSC	44.6	2.4	49.0					
		scaled	38.9	4.6	50.0					
Croatian	14	HSC	40.1	3.8	47.0					
		scaled	27.1	8.3	44.8					
Filipino	11	HSC	44.7	2.1	46.5					
		scaled	19.3	13.0	43.1					
French Beginners	677	HSC	38.4	7.3	50.0	49.0	47.0	44.0	39.5	34.5
		scaled	24.9	11.1	50.0	46.4	40.6	33.4	24.9	16.3
French Continuers	799	HSC	41.5	5.5	50.0	49.0	47.5	45.5	42.5	38.0
		scaled	34.8	8.2	50.0	48.0	44.2	41.0	36.2	29.5
French Extension	200	HSC	42.5	4.3	50.0	50.0	47.0	46.0	43.0	40.0
		scaled	40.7	4.4	50.0	49.4	45.9	43.9	41.1	38.0
German Beginners	69	HSC	41.5	5.5	49.5	49.5	47.5	45.5	43.0	38.0
		scaled	30.6	9.5	50.0	50.0	41.5	37.4	32.5	23.7
German Continuers	277	HSC	40.7	5.4	49.5	49.0	47.0	45.5	41.5	37.0
		scaled	33.0	9.0	50.0	48.2	43.6	40.2	34.4	27.2
German Extension	61	HSC	42.0	4.1	49.0	49.0	47.0	45.0	43.0	39.0
		scaled	39.0	5.6	50.0	50.0	45.5	42.8	39.9	34.9
Hindi	19	HSC	45.0	2.4	48.5					
		scaled	30.0	11.4	50.0					
Indonesian Beginners	43	HSC	37.1	9.0	49.5	49.5	47.5	44.5	38.5	32.0
		scaled	22.4	13.1	50.0	50.0	40.5	31.9	22.0	13.0
Indonesian Continuers	64	HSC	41.8	4.3	49.0	49.0	47.0	45.5	42.0	38.5
		scaled	31.0	9.0	50.0	50.0	43.3	38.9	30.5	23.8

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Indonesian Extension	13	HSC	43.3	4.7	48.0					
		scaled	36.5	7.3	50.0					
Indonesian Background Speakers	68	HSC	37.3	3.0	46.5	46.5	41.5	39.0	37.0	35.5
		scaled	31.2	7.1	48.8	48.8	41.3	35.4	30.6	27.1
Italian Beginners	351	нѕс	35.5	8.1	49.5	49.0	45.0	41.5	36.5	31.0
		scaled	25.7	11.3	50.0	47.8	40.6	34.6	25.9	17.0
Italian Continuers	298	HSC	39.6	6.4	49.5	48.5	46.5	44.5	41.0	36.5
		scaled	31.5	9.3	50.0	48.0	42.6	38.6	32.3	26.3
Italian Extension	67	нѕс	39.1	5.6	50.0	50.0	47.0	44.0	39.0	35.0
		scaled	38.9	5.0	50.0	50.0	46.1	42.7	38.5	35.8
Japanese Beginners	687	HSC	37.4	6.9	49.5	48.5	45.5	43.0	38.0	32.5
		scaled	23.2	11.0	47.3	45.1	37.8	32.1	23.3	14.5
Japanese Continuers	624	нѕс	39.7	5.4	50.0	48.5	45.5	44.0	41.0	35.5
		scaled	32.6	8.9	50.0	47.0	42.9	39.6	34.0	26.1
Japanese Extension	191	HSC	41.7	3.8	49.0	49.0	47.0	45.0	41.0	39.0
		scaled	38.2	4.6	50.0	49.3	44.3	41.4	37.6	35.3
Japanese Background Speakers	11	HSC	40.8	2.5	44.0					
		scaled	24.7	11.8	44.8					
Heritage Japanese	18	HSC	42.0	3.5	47.0					
		scaled	27.4	9.5	46.3					
Khmer	18	HSC	40.7	2.7	44.5					
		scaled	18.6	13.1	46.1					
Korean Continuers	13	HSC	45.8	3.4	49.5					
		scaled	31.2	11.8	50.0					
Korean Background Speakers	63	HSC	40.0	5.0	48.0	48.0	46.0	44.0	40.5	37.0
		scaled	23.0	11.9	50.0	50.0	38.8	31.8	21.0	14.6
Heritage Korean	39	HSC	45.0	3.1	48.5					
		scaled	24.9	12.1	47.3					
Latin Continuers	161	HSC	42.6	5.1	50.0	49.5	48.0	46.0	44.5	39.5
		scaled	40.2	6.9	50.0	49.7	47.4	44.5	42.5	37.0
Latin Extension	105	HSC	44.0	4.3	50.0	50.0	48.0	47.0	45.0	42.0
		scaled	42.7	4.6	50.0	49.7	48.1	46.0	43.7	40.2
Macedonian	22	HSC	42.1	5.2	48.5					
		scaled	22.0	13.1	49.1					
Modern Greek Beginners	47	HSC	40.5	8.9	49.5	49.5	49.0	48.0	43.0	35.5
		scaled	25.9	14.9	50.0	50.0	45.0	39.6	25.7	12.6
Modern Greek Continuers	102	HSC	41.9	4.1	49.0	49.0	47.0	45.5	42.0	39.0
		scaled	27.4	11.0	50.0	48.3	42.9	35.8	26.8	18.6
Modern Greek Extension	47	HSC	43.3	5.8	50.0	50.0	49.0	48.0	45.0	39.0
		scaled	31.3	11.1	50.0	50.0	45.6	41.0	31.6	21.9
Modern Hebrew	56	HSC	44.8	2.3	48.0	48.0	47.5	46.5	45.0	43.5
		scaled	37.4	7.5	50.0	50.0	46.4	43.2	38.0	32.2
Persian	21	HSC	40.9	4.7	49.5					
		scaled	14.3	11.7	41.2					

Course	Number	Type of mark	Mean	SD	Max. mark	P99	P90	P75	P50	P25
Polish	21	HSC	45.0	2.7	48.5					
		scaled	28.3	11.0	50.0					
Portuguese	18	HSC	35.5	3.8	42.5					
		scaled	26.6	10.2	47.7					
Russian	17	нѕс	45.4	4.0	50.0					
		scaled	26.0	14.8	50.0					
Serbian	14	HSC	44.1	2.8	48.5					
		scaled	24.8	12.5	50.0					
Spanish Beginners	202	HSC	37.5	6.4	49.0	48.5	46.0	42.5	37.5	33.0
		scaled	24.2	11.5	49.9	47.8	39.7	33.6	23.8	15.2
Spanish Continuers	169	HSC	38.7	5.3	49.5	47.5	45.0	42.5	39.0	35.5
		scaled	24.1	11.2	49.9	45.4	38.3	33.0	23.4	15.4
Spanish Extension	49	нѕс	39.3	5.3	49.0	49.0	46.0	43.0	40.0	35.0
		scaled	31.7	7.5	48.0	48.0	41.8	36.5	32.0	26.3
Turkish	34	HSC	40.4	4.8	46.5					
		scaled	19.3	14.0	50.0					
Vietnamese	140	HSC	38.1	4.1	47.0	46.5	43.5	41.0	38.0	36.0
		scaled	22.2	11.6	50.0	48.3	37.9	30.6	21.2	14.0
Automotive Exam	415	HSC	33.9	4.5	47.0	46.0	39.5	37.0	33.5	30.5
		scaled	12.5	8.7	34.0	33.8	25.1	18.5	10.2	5.0
Business Services Exam	1,141	HSC	35.7	5.6	48.5	46.0	42.5	39.5	36.5	32.5
		scaled	16.9	9.8	41.1	38.5	31.0	23.8	16.3	8.9
Construction Exam	1,631	HSC	36.1	4.0	46.5	43.5	41.0	39.0	36.5	33.5
		scaled	15.1	9.3	38.1	35.9	28.7	22.1	13.7	6.9
Electrotechnology Exam	305	HSC	34.8	4.2	45.0	44.0	40.0	37.5	35.5	32.0
		scaled	17.1	9.4	39.9	38.7	31.4	23.1	16.5	9.3
Entertainment Industry Exam	911	HSC	35.8	4.7	47.5	46.5	41.5	38.5	36.0	33.0
		scaled	21.2	9.1	43.5	42.0	33.4	27.4	20.5	14.5
Financial Services Exam	229	HSC	37.3	5.5	48.0	48.0	44.5	41.0	37.5	34.0
		scaled	26.8	9.9	49.3	48.4	40.9	33.8	26.7	19.6
Hospitality Exam	5,559	HSC	37.6	4.7	49.0	46.5	43.5	41.0	38.0	34.5
		scaled	19.4	9.8	43.6	39.9	32.9	26.9	18.8	11.8
Human Services Exam	576	HSC	36.3	4.0	49.5	45.0	41.5	39.0	36.5	33.5
		scaled	19.3	9.7	43.2	40.2	33.5	26.8	18.2	11.1
Information & Digital Technology	1,015	HSC	36.6	4.7	48.0	45.5	42.0	39.5	37.0	34.5
Exam		scaled	17.8	9.7	41.8	38.6	31.1	25.2	17.5	10.4
Metal & Engineering Exam	756	HSC	33.4	5.9	47.5	44.5	40.0	37.5	34.0	30.5
		scaled	14.6	9.4	38.0	35.9	29.0	21.7	13.2	7.2
Primary Industries Exam	614	HSC	37.3	4.8	48.5	47.0	42.5	40.0	37.5	35.5
		scaled	16.0	9.1	38.6	37.1	29.1	22.8	14.6	9.0
Retail Services Exam	1,024	HSC	35.4	4.9	46.5	44.0	41.0	39.0	36.0	32.0
		scaled	16.0	10.0	40.6	38.3	30.3	23.4	14.7	7.5
Tourism & Events Exam	331	HSC	37.7	3.9	48.0	46.5	43.0	40.5	38.0	35.5
		scaled	19.6	9.1	42.1	40.6	32.9	26.3	19.6	13.1
Tourism & Events Exam	331	Scaled HSC Scaled	16.0 37.7 19.6	10.0 3.9 9.1	40.6 48.0 42.1	38.3 46.5 40.6	30.3 43.0 32.9	23.4 40.5 26.3	14.7 38.0 19.6	7.5 35.5 13.1

#### Table A4 Distributions of HSC marks by course: 2013-2014

Notes: (i) Columns 45, 40, 35, 30 and 25 show the percentage of the course candidature with an HSC mark less than the specified mark.

(ii) This table excludes courses with less than 40 students in either year.

0	No o v	Number	Perce	ntage of stu	e of students with HSC mark less th					
Course	rear	Number	45	40	35	SC mark less         30         28.3         26.3         19.5         19.3         16.3         16.2         13.8         8.1         11.6         11.4         8.5         10.4         2.9         5.9         4.8         2.9         5.9         4.8         2.9         5.9         4.8         2.9         5.9         4.8         2.9         5.9         4.8         2.9         5.9         4.8         2.9         5.9         4.8         2.9         8.6         13.3         10.0         7.3         14.3         21.0         0.8         1.5         1.1         3.2         6.8         1.5         1.1         3.2         6.8         7.4         10.4 <th>25</th>	25			
Aboriginal Studies	2014	410	91.2	79.8	55.6	28.3	10.0			
	2013	357	93.3	82.9	53.5	26.3	11.8			
Agriculture	2014	1,372	93.4	74.8	44.1	19.5	4.6			
	2013	1,382	90.7	73.0	44.1	19.3	3.9			
Ancient History	2014	11,198	91.3	66.9	38.2	16.3	6.3			
	2013	11,740	91.6	65.3	38.2	16.2	5.7			
Biology	2014	17,138	94.2	71.6	37.8	13.8	4.3			
	2013	16,852	93.3	66.9	31.8	8.1	1.2			
Business Studies	2014	15,991	91.1	62.7	32.3	11.6	2.4			
	2013	15,740	92.0	64.8	33.8	11.4	1.8			
Chemistry	2014	11,173	88.3	53.7	24.3	8.1	2.9			
	2013	11,032	87.9	58.2	26.2	7.8	1.8			
Community & Family Studies	2014	7,687	94.3	62.9	28.9	8.5	1.8			
	2013	7,132	93.5	65.9	33.2	10.4	2.2			
Dance	2014	920	87.2	56.3	23.0	2.9	1.4			
	2013	898	89.0	61.6	28.7	5.9	0.8			
Design & Technology	2014	3,121	89.1	62.7	24.6	4.8	0.5			
	2013	3,165	91.7	62.8	21.5	2.9	0.3			
Drama	2014	4,753	86.7	57.8	15.4	1.4	0.1			
	2013	4,409	86.1	56.3	15.6	1.9	0.1			
Earth & Environmental Science	2014	1,494	93.7	59.8	26.6	8.2	2.1			
	2013	1,399	92.4	62.4	27.3	6.9	1.4			
Economics	2014	5,131	89.1	55.3	27.0	8.6	2.0			
	2013	5,286	87.6	56.8	31.6	13.3	4.2			
Engineering Studies	2014	2,043	90.8	67.1	35.7	10.0	3.0			
	2013	2,049	92.1	69.6	32.5	7.3	1.7			
English Standard	2014	31,483	99.7	91.8	56.5	14.3	2.8			
	2013	31,495	99.6	93.1	65.8	21.0	4.5			
English Advanced	2014	26,729	85.3	40.6	8.4	0.8	0.2			
	2013	27,007	88.0	46.9	13.9	1.5	0.2			
English Extension 1	2014	4,848	69.4	29.3	6.8	1.1	0.3			
	2013	5,007	75.3	34.6	11.5	3.2	0.8			
English Extension 2	2014	1,776	76.8	49.2	22.5	6.8	1.7			
	2013	1,907	77.3	47.7	22.0	7.4	2.4			
ESL	2014	2,291	95.5	71.4	33.8	10.4	2.1			
	2013	2,410	97.4	76.6	40.2	15.7	4.1			
Food Technology	2014	3,538	92.5	70.9	44.4	19.9	3.3			
	2013	3,640	93.4	71.5	43.5	20.9	3.7			
Geography	2014	4,418	92.5	56.0	30.6	14.9	6.1			
	2013	4,109	91.3	60.0	34.9	16.1	6.6			

#### Table A4 Distributions of HSC marks by course: 2013–2014 (continued)

0			Perce	Percentage of students with HSC mark less than:						
Course	Year	Number	45	40	35	30	25			
Industrial Technology	2014	5,360	91.0	71.5	42.4	17.4	5.5			
	2013	5,365	91.8	69.8	39.2	14.9	3.7			
Information Processes & Technology	2014	2,756	92.7	71.3	32.4	11.4	3.0			
	2013	2,984	88.6	62.7	31.4	10.7	3.4			
Legal Studies	2014	10,052	87.3	59.8	33.7	15.2	6.4			
	2013	9,851	88.0	57.1	29.5	11.1	3.0			
Mathematics General 2	2014	31,321	94.5	74.7	48.7	24.0	6.4			
	2013	32,376	94.0	78.8	57.4	23.7	7.9			
Mathematics	2014	16,693	78.2	46.1	18.3	8.5	3.5			
	2013	16,463	81.5	50.5	23.1	7.3	1.9			
Mathematics Extension 1	2014	9,022	69.6	36.8	15.4	5.8	1.9			
	2013	8,839	67.2	36.9	16.3	6.5	2.0			
Mathematics Extension 2	2014	3,371	68.5	35.2	13.5	5.0	1.3			
	2013	3,198	66.0	33.8	12.8	4.3	1.6			
Modern History	2014	10,306	91.3	57.4	24.7	9.9	4.2			
	2013	10,447	89.2	52.6	23.0	8.9	3.5			
History Extension	2014	1,934	77.6	48.8	22.1	5.4	1.7			
	2013	1,988	77.8	52.7	25.9	5.0	1.3			
Music 1	2014	5,002	81.6	40.0	10.9	2.4	0.9			
	2013	5,010	84.9	40.8	10.6	2.1	0.3			
Music 2	2014	765	66.0	12.7	0.8	0.0				
	2013	850	63.6	14.6	0.5	0.0				
Music Extension	2014	475	25.1	4.6	0.8	0.4	0.0			
	2013	504	29.4	8.9	1.6	0.2	0.0			
PDH&PE	2014	14,396	91.5	69.3	36.6	11.1	2.3			
	2013	13,886	94.6	71.4	40.6	17.1	4.8			
Physics	2014	9,598	91.4	68.7	33.3	8.8	2.2			
	2013	9,562	90.7	66.5	34.1	10.9	1.7			
Senior Science	2014	6,328	92.2	63.1	30.3	9.8	2.4			
	2013	5,441	90.7	60.7	31.3	12.0	2.9			
Society & Culture	2014	4,398	87.4	54.9	22.1	6.3	1.8			
	2013	3,939	84.7	52.3	20.9	5.1	1.2			
Software Design & Development	2014	1,719	93.0	71.7	33.4	8.8	2.0			
	2013	1,608	92.8	70.0	34.0	7.8	0.7			
Studies of Religion I	2014	9,299	87.9	51.1	23.9	5.9	1.1			
	2013	9,374	88.3	51.4	22.5	5.9	1.2			
Studies of Religion II	2014	5,464	91.7	55.6	25.7	9.2	2.7			
	2013	5,111	91.5	54.1	24.8	9.3	3.0			
Textiles & Design	2014	1,874	86.6	58.1	28.0	7.6	1.7			
	2013	2,133	90.5	65.5	33.7	9.3	2.4			
Visual Arts	2014	9,071	89.3	51.2	14.5	2.5	0.2			
	2013	9,236	87.7	48.3	11.2	1.4	0.1			
Arabic Continuers	2014	211	92.4	43.6	22.7	10.9	7.1			
	2013	198	91.9	49.0	13.6	4.0	0.5			

#### Table A4 Distributions of HSC marks by course: 2013–2014 (continued)

0	Voor	Number	Percentage of students with HSC mark less than:						
Course	Year	Number	45	40	35	30	25		
Arabic Extension	2014	63	82.5	63.5	25.4	0.0			
	2013	50	88.0	54.0	26.0	4.0	0.0		
Chinese Beginners	2014	54	68.5	50.0	35.2	11.1	1.9		
	2013	52	67.3	30.8	13.5	5.8	0.0		
Chinese Continuers	2014	83	72.3	32.5	10.8	2.4	0.0		
	2013	66	47.0	19.7	6.1	0.0			
Chinese Background Speakers	2014	635	87.1	31.2	1.3	0.6	0.2		
	2013	667	83.5	30.3	5.4	0.5	0.2		
Heritage Chinese (Mandarin)	2014	121	69.4	19.0	6.6	3.3	0.0		
	2013	94	60.6	21.3	4.3	2.1	0.0		
French Beginners	2014	677	80.9	53.0	26.0	10.2	5.6		
	2013	654	83.6	53.4	24.8	9.6	3.4		
French Continuers	2014	799	65.2	34.3	11.0	2.6	1.1		
	2013	822	69.5	33.0	10.1	2.3	0.6		
French Extension	2014	200	60.5	21.0	5.0	1.0	0.0		
	2013	174	46.6	20.1	2.9	1.7	0.0		
German Beginners	2014	69	58.0	39.1	13.0	4.3	0.0		
	2013	98	68.4	42.9	28.6	14.3	3.1		
German Continuers	2014	277	70.4	42.2	14.4	4.0	0.0		
	2013	265	74.7	37.7	18.5	1.9	0.0		
German Extension	2014	61	68.9	29.5	3.3	0.0			
	2013	78	79.5	41.0	10.3	3.8	0.0		
Indonesian Continuers	2014	64	71.9	35.9	4.7	0.0			
	2013	73	69.9	49.3	20.5	2.7	1.4		
Indonesian Background Speakers	2014	68	98.5	80.9	14.7	2.9	0.0		
	2013	68	100.0	70.6	14.7	0.0			
Italian Beginners	2014	351	88.0	65.2	42.7	21.7	7.4		
	2013	345	87.2	70.4	46.1	15.9	3.8		
Italian Continuers	2014	298	77.5	42.3	18.5	6.0	2.7		
	2013	283	76.3	38.9	18.4	6.4	2.8		
Italian Extension	2014	67	77.6	56.7	20.9	4.5	0.0		
	2013	51	60.8	31.4	3.9	2.0	0.0		
Japanese Beginners	2014	687	86.6	58.7	32.6	14.0	3.8		
	2013	625	83.8	61.1	40.6	21.0	5.8		
Japanese Continuers	2014	624	82.9	42.0	21.3	4.0	0.6		
	2013	677	86.4	45.2	22.6	6.1	0.4		
Japanese Extension	2014	191	70.7	28.3	3.7	0.0			
	2013	203	67.0	37.9	9.4	1.0	0.5		
Korean Background Speakers	2014	63	84.1	49.2	15.9	3.2	0.0		
	2013	63	74.6	33.3	11.1	1.6	0.0		
Latin Continuers	2014	161	56.5	25.5	7.5	5.0	0.0		
	2013	166	59.0	18.1	6.0	1.8	0.0		
Latin Extension	2014	105	41.9	16.2	2.9	1.0	1.0		
	2013	106	35.8	13.2	2.8	0.0			

#### Table A4 Distributions of HSC marks by course: 2013–2014 (continued)

0		Number	Percentage of students with HSC mark less th				s than:
Course	Year	Number	45	40	35	30	25
Modern Greek Beginners	2014	47	57.4	38.3	17.0	10.6	8.5
	2013	50	74.0	40.0	28.0	8.0	4.0
Modern Greek Continuers	2014	102	71.6	33.3	2.9	1.0	0.0
	2013	86	75.6	47.7	19.8	7.0	0.0
Modern Hebrew	2014	56	44.6	3.6	0.0		
	2013	52	46.2	0.0			
Spanish Beginners	2014	202	85.1	63.4	31.7	10.9	2.0
	2013	174	85.1	64.9	35.1	19.5	2.3
Spanish Continuers	2014	169	88.8	54.4	21.3	7.1	0.6
	2013	164	84.8	45.7	20.1	9.1	3.7
Spanish Extension	2014	49	83.7	49.0	16.3	2.0	0.0
	2013	55	89.1	47.3	12.7	5.5	0.0
Vietnamese	2014	140	94.3	69.3	20.7	2.1	1.4
	2013	138	96.4	64.5	13.8	0.0	
Automotive Exam	2014	415	98.3	90.4	60.2	18.3	0.7
	2013	370	98.6	87.0	56.8	7.8	0.0
Business Services Exam	2014	1,141	97.7	75.6	39.8	13.3	3.5
	2013	1,323	98.7	82.0	45.4	16.8	3.0
Construction Exam	2014	1,631	99.8	82.2	36.5	5.2	0.6
	2013	1,795	99.8	83.4	45.1	12.1	2.7
Electrotechnology Exam	2014	305	99.3	89.8	45.2	13.4	1.0
	2013	303	98.7	87.8	38.9	7.9	3.0
Entertainment Industry Exam	2014	911	96.9	81.4	40.0	8.7	1.8
	2013	969	99.2	86.6	46.6	11.1	0.5
Financial Services Exam	2014	229	93.9	66.4	29.7	10.0	1.3
	2013	257	93.4	63.0	26.5	8.9	1.9
Hospitality Exam	2014	5,559	95.2	64.1	27.0	4.2	0.7
	2013	5,660	95.5	65.0	23.5	3.3	0.4
Human Services Exam	2014	576	98.4	83.7	35.2	7.1	0.0
	2013	487	98.6	85.0	33.7	5.7	1.6
Information & Digital Technology Exam	2014	1,015	98.3	76.7	28.2	9.2	1.4
	2013	1,157	97.7	71.4	29.5	11.2	2.9
Metal & Engineering Exam	2014	756	99.1	89.7	55.2	22.6	6.1
	2013	854	99.5	91.7	50.6	19.4	9.7
Primary Industries Exam	2014	614	95.4	73.3	21.8	5.4	1.5
	2013	581	96.7	69.4	29.3	6.5	0.7
Retail Services Exam	2014	1,024	99.6	81.3	40.3	12.8	1.5
	2013	1,018	96.9	71.3	29.1	6.7	1.4
Tourism & Events Exam	2014	331	96.4	70.1	22.1	3.0	0.3
	2013	378	97.4	69.8	33.9	4.0	0.3

#### Table A5 Distributions of scaled marks by course: 2013-2014

Notes: (i) Columns 45, 40, 35, 30, 25, 20 and 15 show the percentage of the course candidature with a scaled mark less than the specified mark.

(ii) This table excludes courses with less than 40 students in either year.

Course	Percentage of students with scaled mark l					rk less than:			
Course	rear	Number	45	40	35	30	25	20	15
Aboriginal Studies	2014	410	100.0	94.9	89.8	85.9	81.5	75.4	65.6
	2013	357	100.0	97.2	91.0	87.1	82.4	76.5	68.1
Agriculture	2014	1,372	99.3	94.8	88.0	78.1	66.9	54.3	40.4
	2013	1,382	99.3	94.5	87.8	79.7	66.8	53.5	39.1
Ancient History	2014	11,198	98.6	92.6	82.0	67.7	50.1	34.6	21.5
	2013	11,740	98.8	93.2	82.3	67.3	50.4	34.5	21.3
Biology	2014	17,138	98.9	91.8	77.4	59.5	42.0	26.6	14.8
	2013	16,852	99.2	91.7	75.1	57.6	40.9	26.8	15.3
Business Studies	2014	15,991	99.3	93.6	82.3	68.3	52.9	38.1	24.4
	2013	15,740	99.4	92.9	81.6	67.4	52.7	38.0	24.1
Chemistry	2014	11,173	96.3	78.4	56.8	39.1	24.8	14.3	7.1
	2013	11,032	96.3	79.9	58.8	39.3	24.2	13.3	6.0
Community & Family Studies	2014	7,687	100.0	98.9	92.4	82.0	69.4	54.5	39.1
	2013	7,132	100.0	98.5	92.3	81.1	68.7	53.6	38.1
Dance	2014	920	98.4	91.3	83.0	72.8	60.8	45.3	27.5
	2013	898	99.6	93.8	84.4	75.5	62.4	46.0	29.7
Design & Technology	2014	3,121	99.4	95.1	87.7	76.4	62.6	47.8	33.1
	2013	3,165	99.5	95.7	85.5	73.9	59.7	43.8	27.1
Drama	2014	4,753	98.8	93.1	83.3	70.4	55.7	39.7	22.7
	2013	4,409	98.0	91.8	82.9	69.6	52.8	35.9	21.1
Earth & Environmental Science	2014	1,494	99.1	93.6	83.7	68.2	50.3	34.9	21.5
	2013	1,399	98.5	92.6	81.9	67.9	50.3	32.0	19.7
Economics	2014	5,131	96.9	78.5	54.2	33.9	20.8	12.2	6.4
	2013	5,286	96.3	79.8	57.1	37.9	23.0	12.3	6.2
Engineering Studies	2014	2,043	98.8	93.1	81.9	66.1	48.7	29.5	13.8
	2013	2,049	99.6	95.6	84.2	67.4	49.2	30.8	14.6
English Standard	2014	31,483	99.9	99.6	97.2	90.0	75.9	55.8	33.2
	2013	31,495	99.9	99.3	96.5	89.6	76.0	55.8	33.9
English Advanced	2014	26,729	97.6	83.4	60.3	37.1	19.2	8.1	2.8
	2013	27,007	97.5	83.1	60.5	37.2	20.6	9.3	3.3
English Extension 1	2014	4,848	92.8	67.1	38.3	17.4	6.1	1.9	0.5
	2013	5,007	97.4	77.1	42.7	16.4	5.2	1.8	0.3
English Extension 2	2014	1,776	90.0	68.8	41.6	20.0	8.2	2.2	0.6
	2013	1,907	95.5	76.5	46.0	20.2	6.9	1.9	0.5
ESL	2014	2,291	98.3	93.6	85.0	73.9	59.7	44.8	30.7
	2013	2,410	98.8	94.4	85.0	73.7	60.0	46.1	31.2
Food Technology	2014	3,538	99.8	96.2	87.8	78.9	66.8	55.4	41.0
	2013	3,640	99.8	96.2	88.3	77.5	66.1	51.8	37.9
Geography	2014	4,418	98.5	90.8	78.4	63.1	47.6	33.4	21.4
	2013	4,109	98.6	91.3	79.0	63.9	48.2	33.8	20.6

#### Table A5 Distributions of scaled marks by course: 2013–2014 (continued)

Course	Veer	Percentage of students with scaled mark less					less than:	:	
Course	rear	Number	45	40	35	30	25	20	15
Industrial Technology	2014	5,360	100.0	99.9	96.3	88.7	78.9	65.7	49.9
	2013	5,365	100.0	99.9	96.1	87.9	77.3	63.2	47.6
Information Processes & Technology	2014	2,756	99.6	95.0	87.1	77.0	62.7	47.7	32.2
	2013	2,984	99.3	94.7	87.0	74.3	60.5	45.2	29.9
Legal Studies	2014	10,052	98.2	90.1	78.5	63.1	46.6	31.6	19.3
	2013	9,851	98.1	91.0	78.5	62.7	46.8	31.9	19.5
Mathematics General 2	2014	31,321	99.9	97.5	88.4	75.4	60.9	45.6	30.3
	2013	32,376	99.9	97.8	89.1	76.1	61.3	46.0	30.5
Mathematics	2014	16,693	95.3	78.4	59.0	40.4	25.3	14.5	7.7
	2013	16,463	98.3	84.4	60.5	38.6	22.7	12.6	6.4
Mathematics Extension 1	2014	9,022	81.6	47.3	21.9	9.3	3.9	1.6	0.6
	2013	8,839	78.2	43.4	21.6	10.4	4.7	1.9	0.6
Mathematics Extension 2	2014	3,371	63.9	18.2	5.6	1.8	0.6	0.3	0.1
	2013	3,198	54.3	15.7	4.8	1.9	0.9	0.3	0.1
Modern History	2014	10,306	98.8	90.3	74.4	56.1	39.5	26.7	17.6
	2013	10,447	98.8	90.6	74.1	55.1	39.1	26.7	17.1
History Extension	2014	1,934	97.9	80.9	52.0	24.6	9.7	2.9	1.2
	2013	1,988	98.3	82.2	51.3	23.8	7.9	2.6	0.8
Music 1	2014	5,002	99.5	95.6	87.9	76.6	63.2	47.4	31.9
	2013	5,010	99.6	95.3	87.7	76.7	62.6	45.7	29.9
Music 2	2014	765	91.2	77.3	53.1	32.0	14.0	4.6	1.0
	2013	850	92.7	74.5	53.3	31.5	15.5	4.2	0.7
Music Extension	2014	475	80.0	68.0	51.4	29.3	14.3	4.0	0.8
	2013	504	80.8	70.4	48.8	29.8	14.5	4.0	1.0
PDH&PE	2014	14,396	99.6	95.1	85.0	71.8	56.2	40.8	25.3
	2013	13,886	99.6	94.6	84.4	71.1	56.1	41.0	26.2
Physics	2014	9,598	97.5	82.2	62.2	43.2	28.1	16.2	7.7
	2013	9,562	97.1	83.1	62.9	44.0	29.2	17.5	8.6
Senior Science	2014	6,328	100.0	98.8	93.6	84.1	70.8	55.3	38.9
	2013	5,441	100.0	98.2	92.7	82.6	69.3	54.4	39.2
Society & Culture	2014	4,398	99.1	94.2	84.1	71.5	56.0	39.4	23.4
	2013	3,939	98.3	91.8	82.7	70.7	56.1	40.1	24.1
Software Design & Development	2014	1,719	98.4	92.1	82.3	69.2	54.3	39.8	24.7
	2013	1,608	99.7	95.2	83.1	68.2	52.7	36.6	21.5
Studies of Religion I	2014	9,299	99.1	93.1	78.5	58.2	36.5	20.2	9.2
	2013	9,374	99.1	92.2	76.9	58.2	38.1	20.7	8.5
Studies of Religion II	2014	5,464	98.7	90.9	75.9	57.1	38.2	23.7	12.5
	2013	5,111	98.6	90.0	75.3	58.6	40.1	24.0	13.0
Textiles & Design	2014	1,874	99.2	93.2	85.8	73.9	59.4	43.1	27.7
	2013	2,133	99.5	95.7	86.5	73.9	59.4	44.4	27.4
Visual Arts	2014	9,071	99.0	93.7	85.2	73.6	60.2	44.7	29.2
	2013	9,236	98.7	93.5	84.7	73.5	60.2	44.8	29.7

#### Table A5 Distributions of scaled marks by course: 2013–2014 (continued)

0	) (	Percentage of students with scaled mark less than:							
Course	Year	Number	45	40	35	30	25	20	15
Arabic Continuers	2014	211	99.5	97.2	91.0	80.1	72.0	60.2	44.1
	2013	198	99.5	94.9	90.4	82.3	71.7	58.6	49.0
Arabic Extension	2014	63	100.0	98.4	96.8	82.5	49.2	15.9	0.0
	2013	50	100.0	94.0	76.0	56.0	44.0	14.0	4.0
Chinese Beginners	2014	54	90.7	77.8	68.5	68.5	53.7	44.4	33.3
	2013	52	94.2	88.5	71.2	61.5	46.2	30.8	15.4
Chinese Continuers	2014	83	94.0	78.3	60.2	34.9	19.3	7.2	3.6
	2013	66	92.4	71.2	43.9	25.8	19.7	16.7	4.5
Chinese Background Speakers	2014	635	97.5	92.0	85.5	72.9	56.1	44.1	30.1
	2013	667	98.2	95.1	85.8	75.7	59.8	41.5	27.0
Heritage Chinese (Mandarin)	2014	121	96.7	86.8	64.5	43.0	24.0	13.2	6.6
	2013	94	89.4	84.0	60.6	42.6	25.5	13.8	4.3
French Beginners	2014	677	97.9	89.1	79.5	66.8	50.5	33.5	21.7
	2013	654	97.4	91.3	81.7	69.9	53.8	37.9	22.5
French Continuers	2014	799	92.7	68.6	44.4	26.5	13.1	5.3	1.6
	2013	822	92.3	69.8	46.7	27.1	13.6	5.1	2.2
French Extension	2014	200	84.5	40.5	9.0	1.0	0.5	0.0	
	2013	174	83.9	48.3	14.9	2.3	0.6	0.0	
German Beginners	2014	69	94.2	84.1	56.5	44.9	29.0	13.0	5.8
	2013	98	94.9	88.8	69.4	50.0	41.8	29.6	18.4
German Continuers	2014	277	93.9	74.0	52.3	33.9	19.9	11.2	4.0
	2013	265	90.9	71.3	46.0	29.8	15.1	7.9	1.9
German Extension	2014	61	88.5	55.7	27.9	4.9	1.6	0.0	
	2013	78	89.7	55.1	20.5	3.8	0.0		
Indonesian Continuers	2014	64	96.9	81.3	59.4	48.4	32.8	10.9	1.6
	2013	73	93.2	76.7	61.6	46.6	23.3	11.0	2.7
Indonesian Background Speakers	2014	68	95.6	85.3	69.1	45.6	14.7	4.4	2.9
	2013	68	98.5	89.7	69.1	41.2	16.2	2.9	0.0
Italian Beginners	2014	351	96.0	88.3	76.4	60.7	47.0	34.2	20.8
	2013	345	95.4	87.8	77.1	62.9	47.2	32.2	15.7
Italian Continuers	2014	298	95.6	80.2	61.1	38.9	21.1	12.4	5.7
	2013	283	97.2	85.2	61.5	39.2	24.7	14.8	6.4
Italian Extension	2014	67	88.1	64.2	20.9	4.5	0.0		
	2013	51	94.1	66.7	35.3	3.9	2.0	0.0	05.0
Japanese Beginners	2014	687	99.0	94.2	85.0	67.8	55.0	41.0	25.9
lananaa Cantinuara	2013	625	98.7	91.2	81.4	67.0	53.8	37.9	24.8
Japanese Continuers	2014	624	96.0	70.0	54.2	34.8	21.3	10.4	3.7
Jananasa Extension	2013	101	96.0	79.8 66.0	59.4 22.0	30.9	22.0	12.6	4.4
Japanese Extension	2014	191	92.7	67.5	23.0	3.7	1.5	0.0	0.0
Korean Background Speakore	2013	203	95.1	92.1	825	68.2	57.1	44.4	25.4
Norean Dackground Speakers	2014	62	03.7	92.1	82.5	68.2	52.4	44.4	20.4
Latin Continuers	2013	161	77.0	30.5	16.1	Q 1	5.0	25	0.0
	2017	166	795	37.3	169	7.2	3.6	1.9	0.0
	2013	100		01.5	10.9	1.2	0.0	1.0	0.0

#### Table A5 Distributions of scaled marks by course: 2013–2014 (continued)

Course	Veer	Number	Percentage of students with scaled mark less than:						
Course	rear	Number	45	40	35	30	25	20	15
Latin Extension	2014	105	63.8	24.8	5.7	1.0	1.0	0.0	
	2013	106	68.9	26.4	13.2	2.8	0.0		
Modern Greek Beginners	2014	47	91.5	76.6	61.7	55.3	46.8	38.3	34.0
	2013	50	90.0	88.0	74.0	60.0	50.0	38.0	30.0
Modern Greek Continuers	2014	102	94.1	81.4	71.6	61.8	45.1	29.4	10.8
	2013	86	94.2	88.4	75.6	68.6	52.3	29.1	19.8
Modern Hebrew	2014	56	85.7	57.1	39.3	14.3	7.1	3.6	0.0
	2013	52	86.5	73.1	48.1	26.9	3.8	0.0	
Spanish Beginners	2014	202	95.5	90.1	80.2	68.3	54.0	41.1	24.3
	2013	174	97.1	92.0	82.8	71.3	58.6	42.5	28.7
Spanish Continuers	2014	169	97.6	92.3	81.7	66.9	54.4	36.7	23.7
	2013	164	97.0	94.5	83.5	65.9	49.4	36.6	22.6
Spanish Extension	2014	49	95.9	85.7	65.3	42.9	16.3	4.1	0.0
	2013	55	98.2	98.2	80.0	36.4	9.1	1.8	0.0
Vietnamese	2014	140	97.1	92.9	85.0	74.3	60.0	43.6	30.0
	2013	138	98.6	96.4	90.6	79.7	62.3	49.3	34.1
Automotive Exam	2014	415			100.0	95.9	89.6	79.0	63.9
	2013	370		100.0	99.5	93.2	85.9	74.9	59.7
Business Services Exam	2014	1,141	100.0	99.4	96.1	87.6	75.6	64.3	46.7
	2013	1,323	100.0	98.7	94.3	86.7	75.7	59.0	42.4
Construction Exam	2014	1,631		100.0	98.7	93.3	82.2	69.7	54.6
	2013	1,795		100.0	97.3	90.7	81.1	66.0	54.2
Electrotechnology Exam	2014	305		100.0	97.4	87.2	80.3	61.6	45.2
	2013	303		100.0	98.0	90.1	80.2	64.4	38.9
Entertainment Industry Exam	2014	911	100.0	98.0	91.7	81.4	66.4	47.2	26.6
	2013	969	100.0	98.0	91.3	80.8	63.2	46.6	26.1
Financial Services Exam	2014	229	96.5	88.6	76.0	60.3	43.7	26.2	13.5
	2013	257	98.4	80.5	69.7	50.6	32.7	21.4	9.7
Hospitality Exam	2014	5,559	100.0	99.2	93.6	84.7	70.4	53.8	34.7
	2013	5,660	100.0	98.3	92.7	82.3	68.7	55.1	34.8
Human Services Exam	2014	576	100.0	98.4	93.2	83.7	70.8	54.2	38.0
	2013	487	100.0	99.6	95.1	86.4	73.5	56.5	36.8
Information & Digital Technology	2014	1,015	100.0	99.6	96.2	87.1	73.8	58.4	39.4
Exam	2013	1,157	100.0	99.4	94.6	87.0	74.0	64.0	46.7
Metal & Engineering Exam	2014	756		100.0	98.8	92.1	82.4	71.0	57.9
	2013	854		100.0	98.2	91.7	82.1	64.9	50.6
Primary Industries Exam	2014	614		100.0	97.4	91.4	83.1	67.3	50.0
	2013	581		100.0	96.7	90.4	79.3	64.0	43.5
Retail Services Exam	2014	1,024	100.0	99.8	96.2	89.1	78.5	66.5	52.1
	2013	1,018	100.0	99.4	94.8	85.7	78.3	66.0	53.7
Tourism & Events Exam	2014	331	100.0	98.8	93.4	86.7	70.1	52.9	33.8
	2013	378	100.0	99.2	93.1	82.3	66.1	47.1	29.9

#### Table A6 Courses that contribute to the ATAR

- Notes: (i) This table shows the percentage of the course candidature who completed more than 10 units of ATAR courses and for whom *all* units of that course contributed to their ATAR.
  - (ii) The *Number receiving ATAR* column shows the number of students who completed the course in 2014 or in a previous year and who received an ATAR in 2014.
  - (iii) The ATAR students with > 10 units columns show the number and percentage of ATAR students who completed more than 10 units of ATAR courses.
  - (iv) The *Percentage who counted course* column shows the percentage of ATAR students who completed more than 10 units of ATAR courses and for whom all units of that course contributed towards their ATAR.
  - (v) The *Maximum ATAR including the course* column shows the maximum ATAR of any student doing the course in any year and including all units from that course in their ATAR calculation.
  - (vi) This table excludes courses with less than 10 students.

<u>,</u>	Number	ATAR students	with > 10 units	Percentage who	Maximum ATAR
Course	ATAR	Number	Percentage	counted course	including the course
Aboriginal Studies	221	75	34	71	97.95
Agriculture	1,003	494	49	77	99.95
Ancient History	10,367	4,467	43	86	99.90
Biology	16,465	7,931	48	81	99.95
Business Studies	14,764	6,004	41	86	99.90
Chemistry	11,063	6,990	63	75	99.95
Community & Family Studies	6,006	2,205	37	86	99.45
Dance	786	244	31	63	98.95
Design & Technology	2,633	1,115	42	75	99.30
Drama	4,191	1,561	37	75	99.80
Earth & Environmental Science	1,388	558	40	82	99.80
Economics	5,079	2,966	58	76	99.95
Engineering Studies	1,949	1,048	54	71	99.90
English Standard	26,900	8,773	33	100	99.80
English Advanced	26,479	14,168	54	98	99.95
English Extension 1	4,840	3,461	72	85	99.95
English Extension 2	1,773	1,134	64	81	99.95
ESL	2,103	737	35	100	99.95
Food Technology	2,745	996	36	86	99.45
Geography	4,019	1,813	45	85	99.95
Industrial Technology	3,422	1,175	34	74	95.25
Information Processes & Technology	2,537	1,228	48	76	99.95
Legal Studies	9,549	4,147	43	85	99.95
Mathematics General 2	27,747	9,653	35	72	99.65
Mathematics	15,579	9,621	62	71	99.95
Mathematics Extension 1	8,917	6,663	75	89	99.95
Mathematics Extension 2	3,369	1,908	57	97	99.95
Modern History	9,657	4,616	48	83	99.95
History Extension	1,922	1,532	80	81	99.95
Music 1	4,142	1,655	40	62	99.30
Music 2	746	556	75	69	99.95
Music Extension	466	372	80	70	99.95
PDH&PE	13,074	5,180	40	85	99.90

#### Table A6 Courses that contribute to the ATAR (continued)

	Number	ATAR students	with > 10 units	Percentage who	Maximum ATAR	
Course	ATAR	Number	Percentage	counted course	including the course	
Physics	9,547	5,825	61	75	99.95	
Senior Science	5,035	1,770	35	84	98.90	
Society & Culture	4,042	1,432	35	85	99.95	
Software Design & Development	1,567	812	52	73	99.80	
Studies of Religion I	8,949	8,050	90	80	99.95	
Studies of Religion II	5,245	1,931	37	86	99.85	
Textiles & Design	1,591	567	36	78	99.90	
Visual Arts	7,651	2,893	38	73	99.95	
Arabic Continuers	173	91	53	70	95.95	
Arabic Extension	56	50	89	86	88.35	
Armenian	26	22	85	64	97.35	
Chinese Beginners	49	17	35	82	97.70	
Chinese Continuers	81	53	65	55	99.65	
Chinese Extension	27	23	85	78	99.65	
Chinese Background Speakers	611	223	36	67	99.70	
Heritage Chinese (Mandarin)	119	73	61	56	99.80	
Classical Greek Continuers	19	17	89	65	99.95	
Classical Greek Extension	13	12	92	83	99.95	
Classical Hebrew Continuers	33	25	76	68	99.85	
Classical Hebrew Extension	16	14	88	86	97.45	
Croatian	12	9	75	67	88.80	
Filipino	13	3	23	33	84.25	
French Beginners	627	239	38	73	99.75	
French Continuers	799	585	73	71	99.95	
French Extension	199	178	89	87	99.95	
German Beginners	66	36	55	69	99.65	
German Continuers	288	194	67	68	99.95	
German Extension	63	56	89	84	99.95	
Hindi	17	13	76	38	97.10	
Indonesian Beginners	39	17	44	76	99.15	
Indonesian Continuers	63	34	54	59	99.15	
Indonesian Extension	13	11	85	73	97.50	
Indonesian Background Speakers	67	30	45	47	99.30	
Italian Beginners	314	146	46	79	99.65	
Italian Continuers	291	198	68	68	99.85	
Italian Extension	63	52	83	88	99.85	
Japanese Beginners	641	227	35	69	99.75	
Japanese Continuers	624	415	67	64	99.90	
Japanese Extension	193	144	75	83	99.90	
Japanese Background Speakers	12	4	33	50	80.65	
Heritage Japanese	17	10	59	40	91.45	

#### Table A6 Courses that contribute to the ATAR (continued)

	Number	ATAR students	with > 10 units	Percentage who	Maximum ATAR	
Course	ATAR	Number	Percentage	counted course	including the course	
Khmer	16	7	44	86	89.90	
Korean Continuers	13	6	46	67	99.75	
Korean Background Speakers	58	11	19	45	97.55	
Heritage Korean	38	11	29	91	99.35	
Latin Continuers	158	141	89	73	99.95	
Latin Extension	104	99	95	71	99.95	
Macedonian	22	13	59	69	96.70	
Modern Greek Beginners	39	22	56	68	96.55	
Modern Greek Continuers	94	77	82	65	98.35	
Modern Greek Extension	43	40	93	85	98.35	
Modern Hebrew	48	32	67	72	99.85	
Persian	14	8	57	75	94.25	
Polish	20	14	70	57	97.15	
Portuguese	16	10	63	50	92.35	
Russian	14	5	36	80	99.30	
Serbian	12	7	58	71	98.95	
Spanish Beginners	186	66	35	77	99.75	
Spanish Continuers	152	93	61	68	98.60	
Spanish Extension	48	41	85	93	97.80	
Tamil	37	29	78	34	94.35	
Turkish	32	14	44	36	97.35	
Vietnamese	126	69	55	59	99.20	
Automotive Exam	141	61	43	57	84.85	
Business Services Exam	868	289	33	80	97.15	
Construction Exam	969	321	33	72	88.55	
Electrotechnology Exam	202	90	45	68	96.25	
Entertainment Industry Exam	805	293	36	81	97.05	
Financial Services Exam	221	88	40	70	99.80	
Hospitality Exam	4,779	1,723	36	79	99.20	
Human Services Exam	509	187	37	73	94.45	
Information & Digital Technology Exam	865	341	39	63	94.40	
Metal & Engineering Exam	428	215	50	67	89.95	
Primary Industries Exam	386	173	45	77	92.95	
Retail Services Exam	785	302	38	67	96.20	
Tourism & Events Exam	255	66	26	74	95.10	

#### Table A7 ATAR distribution

(ii) The median ATAR in 2014 was 68.95.

ATAR	Number	Number on or above	Percentage on or above
99.95	47	47	0.1
99.90	46	93	0.2
99.85	45	138	0.2
99.80	48	186	0.3
99.75	47	233	0.4
99.70	42	275	0.5
99.65	48	323	0.6
99.60	49	372	0.7
99.55	41	413	0.7
99.50	50	463	0.8
99.45	45	508	0.9
99.40	44	552	1.0
99.35	50	602	1.1
99.30	47	649	1.2
99.25	46	695	1.3
99.20	44	739	1.3
99.15	44	783	1.4
99.10	44	827	1.5
99.05	49	876	1.6
99.00	50	926	1.7
99.00-99.95	926	926	1.7
98.00-98.95	920	1,846	3.3
97.00-97.95	921	2,767	5.0
96.00-96.95	919	3,686	6.6
95.00-95.95	908	4,594	8.3
94.00-94.95	917	5,511	9.9
93.00-93.95	919	6,430	11.6
92.00-92.95	922	7,352	13.3
91.00-91.95	906	8,258	14.9
90.00-90.95	914	9,172	16.5
89.00-89.95	903	10,075	18.2
88.00-88.95	910	10,985	19.8
87.00-87.95	917	11,902	21.5
86.00-86.95	903	12,805	23.1
85.00-85.95	904	13,709	24.7
84.00-84.95	904	14,613	26.3
83.00-83.95	886	15,499	27.9
82.00-82.95	889	16,388	29.5
81.00-81.95	892	17,280	31.1
80.00-80.95	893	18,173	32.8
79.00-79.95	888	19,061	34.4
78.00-78.95	888	19,949	36.0
77.00-77.95	878	20,827	37.5

Note: (i) This table shows the number of students receiving each ATAR from 99.95 to 99.00 and the number corresponding to the stated ATAR ranges down to 30.00–30.95.

#### Table A7 ATAR distribution (continued)

ATAR	Number	Number on or above	Percentage on or above
76.00-76.95	880	21,707	39.1
75.00-75.95	878	22,585	40.7
74.00-74.95	873	23,458	42.3
73.00-73.95	842	24,300	43.8
72.00-72.95	864	25,164	45.4
71.00-71.95	870	26.034	46.9
70.00-70.95	833	26.867	48.4
69.00-69.95	841	27.708	49.9
68.00-68.95	845	28.553	51.5
67.00-67.95	813	29.366	52.9
66.00-66.95	833	30.199	54.4
65.00-65.95	811	31.010	55.9
64.00-64.95	807	31.817	57.3
63.00-63.95	806	32.623	58.8
62.00-62.95	789	33.412	60.2
61.00-61.95	782	34.194	61.6
60.00-60.95	769	34.963	63.0
59.00-59.95	761	35.724	64.4
58.00-58.95	742	36.466	65.7
57.00-57.95	742	37.208	67.1
56.00-56.95	739	37.947	68.4
55.00-55.95	718	38.665	69.7
54.00-54.95	689	39.354	70.9
53.00-53.95	695	40.049	72.2
52.00-52.95	670	40,719	73.4
51.00-51.95	671	41,390	74.6
50.00-50.95	642	42,032	75.8
49.00-49.95	644	42,676	76.9
48.00-48.95	608	43,284	78.0
47.00-47.95	615	43,899	79.1
46.00-46.95	582	44,481	80.2
45.00-45.95	569	45,050	81.2
44.00-44.95	555	45,605	82.2
43.00-43.95	536	46,141	83.2
42.00-42.95	516	46,657	84.1
41.00-41.95	511	47,168	85.0
40.00-40.95	485	47,653	85.9
39.00-39.95	458	48,111	86.7
38.00-38.95	454	48,565	87.5
37.00-37.95	432	48,997	88.3
36.00-36.95	422	49,419	89.1
35.00-35.95	399	49,818	89.8
34.00-34.95	378	50,196	90.5
33.00-33.95	367	50,563	91.1
32.00-32.95	352	50,915	91.8
31.00-31.95	331	51,246	92.4
30.00-30.95	322	51,568	92.9

#### Table A8ATAR percentiles: 2010-2014

Note: This table shows the ATAR at selected percentiles of the ATAR cohort.

Percentile	ATAR 2010	ATAR 2011	ATAR 2012	ATAR 2013	ATAR 2014
100	99.95	99.95	99.95	99.95	99.95
99	99.40	99.40	99.40	99.40	99.35
98	98.80	98.80	98.80	98.80	98.75
95	97.10	97.00	97.05	97.00	96.95
90	94.20	94.05	94.10	94.00	93.95
85	91.30	91.05	91.15	91.00	90.90
80	88.30	88.05	88.15	88.00	87.85
75	85.35	85.05	85.15	84.95	84.80
70	82.35	82.00	82.10	81.90	81.70
60	76.20	75.80	75.95	75.70	75.40
50	69.80	69.25	69.55	69.20	68.95
40	62.85	62.30	62.75	62.40	62.15
30	55.25	54.70	55.30	54.90	54.70

#### Table A9 Relationship between the ATAR and aggregates: 2010–2014

Note: This table shows the lowest aggregate of scaled marks corresponding to each of the selected ATARs.

ATAR	Lowest aggregate					
	2010	2011	2012	2013	2014	
99.95	476.2	476.5	475.2	477.9	475.3	
99.50	455.2	456.2	454.2	455.0	454.0	
99.00	444.8	445.6	443.9	443.8	444.5	
98.00	430.0	432.2	429.7	429.5	431.2	
95.00	403.0	403.7	401.6	402.6	404.4	
90.00	369.6	371.2	369.4	371.3	372.2	
85.00	341.5	343.7	343.0	344.8	345.1	
80.00	317.6	318.9	318.4	321.3	320.6	
75.00	295.5	295.7	295.3	297.9	296.9	
70.00	273.4	274.1	272.8	276.1	275.0	
65.00	252.5	252.9	251.1	253.5	253.3	
60.00	231.7	233.1	229.9	232.2	231.9	
55.00	211.6	213.0	209.5	211.3	210.8	
50.00	192.4	193.5	190.5	191.3	189.9	

## Report on the Scaling of the 2014 NSW Higher School Certificate

© 2015 Universities Admissions Centre (NSW & ACT) Pty Ltd ACN 070 055 935 ABN 19 070 055 935

ISSN 1449-8723 Printed May 2015

UAC and the Technical Committee on Scaling are the owners of the Copyright in this publication.

Apart from any fair dealing for the purpose of private study, criticism or review, or otherwise as permitted under the Copyright Act 1968, no part may be reproduced by any process without UAC's written permission. Enquiries should be addressed to the Managing Director, UAC.

UAC and the Technical Committee on Scaling endeavour to consider copyright requests on their individual merits. As UAC and the Technical Committee on Scaling does not endorse the use of ATAR calculators or other predictive applications, requests for the use of data for this purpose will generally not be granted.

UAC has no objection to schools and tertiary institutions reproducing the publication provided it is for use only within their own institution and this copyright statement is included. If the document is not reproduced in full, individual sections should not be reproduced out of context where information could be incomplete and/or misleading. Schools and tertiary institutions must ensure that this information is not transmitted to any other person or body without prior permission from UAC.

ATAR is a registered trademark of the Victorian Tertiary Admissions Centre on behalf of all Australian tertiary admissions centres.

#### About this publication

This report contains information on the calculation of the Australian Tertiary Admission Rank (ATAR) in 2014. It includes an overview of the HSC and the ATAR, a breakdown of the scaling process, analysis of HSC and ATAR statistics and notes trends for the year.

#### **Cover picture**

Jennifer Anne Dunn

Northern Beaches Secondary College Freshwater Senior Campus

#### Murramarang (Painting)

I have always been impressed by the arboreal splendour of the spotted gums endemic to Murramarang, with their tall, straight and distinctively patterned trunks. My long association and deep connection with this particular place is the foundation of my work. Evocative materials are symbolic, with each layer of wax representing layers of built up memories and images formed over time. As I developed the work my desire to find the intrinsic nature of the landscape led to a more abstracted approach inspired by Angus Nivison, Fred Williams and Imants Tillers.

#### ARTEXPRESS

ARTEXPRESS is an annual exhibition of outstanding works selected from the NSW Higher School Certificate examination in Visual Arts. ARTEXPRESS is a joint project of the NSW Department of Education and Communities and the NSW Board of Studies, Teaching and Educational Standards in association with the Art Gallery of NSW. The artworks are on display at the Art Gallery of New South Wales, Hazelhurst Regional Gallery and Arts Centre, The Armory, Sydney Olympic Park, McGlade Art Gallery, Australian Catholic University and the Margaret Whitlam Gallery, University of Western Sydney from February to September, as well as touring regional galleries throughout NSW.

#### Important Information

#### **UAC** disclaimer

While UAC and the authors of this publication have used their best endeavours to ensure that information and analyses of information contained in this publication are correct, any use or reliance whatsoever on the publication by any person is that person's responsibility and UAC and the authors of this publication disclaim any responsibility or liability in relation to that use or reliance.

#### Advertising disclaimer

UAC does not necessarily endorse any product or service that may be advertised in this publication.

#### Fees and charges

All UAC fees and charges include 10 per cent GST. UAC charges and fees are not refundable under any circumstances, except as required by law.

#### Times

Times indicated in this publication are based on Sydney local time.

#### UAC Privacy Policy

The Universities Admissions Centre (NSW & ACT) Pty Ltd (UAC) recognises the importance of protecting personal information and is bound by the NSW State Information Protection Principles<sup>1</sup>, the National Privacy Principles<sup>2</sup> and the NSW Health Privacy Principles<sup>3</sup>.

Details of UAC's Privacy Policy are available at www.uac.edu.au/general/ privacy.shtml.

UAC collects personal information and, in some circumstances, information regarding your health, or information about someone other than yourself, for the purpose of processing your application for admission to tertiary institutions. UAC will only collect information for lawful purposes related to its function. You may seek access to personal information about you collected by UAC.

The type of personal information UAC holds includes your contact details (name, address, telephone number, email address), date of birth, gender, citizenship, educational achievements, professional qualifications, employment experience, examination results, information related to your health or the health of a family member and your Australian Tertiary Admission Rank (ATAR).

If you are providing personal information about someone other than yourself, you should tell them about UAC's Privacy Policy, which can be found on UAC's website at www.uac.edu.au/general/privacy.shtml.

If you are a NSW Higher School Certificate student, your Year 12 results will be held, along with Year 12 results from other states and territories in Australia, in an archive database at UAC. If you are eligible for an Australian Tertiary Admission Rank (ATAR) or a Limited ATAR, these will also be held in the database. Your results, including your ATAR if you are eligible, will be held in similar archives at tertiary admissions centres in other states in Australia. Results held in these archives will only be accessed by the relevant tertiary admission centre if you initiate an application for tertiary study through that centre, or if you submit an application for tertiary study directly with an institution participating in that centre.

Any questions regarding privacy at UAC should be forwarded in writing to: The Managing Director, UAC, Locked Bag 112, Silverwater NSW 2128.

- 1 In the Privacy and Personal Information Protection Act 1998 (NSW).
- 2 In the Privacy Act 1988 (Cth).
- 3 In the Health Records and Information Privacy Act 2002 (NSW).

### 2015 edition

Universities Admissions Centre (NSW & ACT) Pty Ltd Quad 2, 8 Parkview Drive Sydney Olympic Park NSW Locked Bag 112, Silverwater NSW 2128 1300 ASK UAC (1300 275 822) from mobiles: (02) 9752 0200 from overseas: +61 2 9752 0200 www.uac.edu.au ABN 19 070 055 935 ACN 070 055 935

