## Scaling in the Higher School Certificate

## How are HSC scores

## and

## ATARs determined?

## Scaling in the Higher School Certificate

The school's website is www.sydneyboyshigh.com
Register on the website for the Parent Portal. This will give access to timetables, attendance information, past reports, examination timetables, assessment information etc.

High Notes is issued each Friday and has an up to date calendar on the back page. The calendar on the school website is updated at least hourly.

High Notes is also available on the web site. You can register to receive an email reminder about High Notes. When High Notes is placed on the website, you receive an email with a link to the appropriate page.

## Scaling in the Higher School Certificate

The Board of Studies web site has the official information about anything to do with the HSC - syllabi, past papers, policies etc www.boardofstudies.nsw.edu.au

This Charles Sturt University site has specific information about HSC courses tutorials, past papers etc
www.hsc.csu.edu.au

## Scaling in the Higher School Certificate

- Most subjects studied for the HSC are 2 Unit subjects.
- A 2 Unit subject is normally allocated 9 periods per fortnight.
- There are 56 periods available on the timetable per fortnight.
- 12 Units use 54 of these periods.
- Year 11 boys are required to study 12 Units.
- Year 12 boys must study at least 10 Units.
- Most boys at SBHS study 10 Units in Year 12.


## Scaling in the Higher School Certificate

## Subject choices

- English is the only compulsory subject for the HSC
- Students at SBHS will make up their 12 Preliminary Course units with:
o English Advanced and English Extension
o Four 2 unit subjects
0 and one of
- Mathematics Extension
- Studies of Religion
- 4 subjects must be studied for the HSC


## Scaling in the Higher School Certificate

Some school-imposed limits on subject numbers:

- Year 11 Mathematics Extension - 7 classes (168 boys)
- Year 12 Mathematics Extension 2 - 5 classes (120 boys)
- Year 12 English Extension 1 - 3 classes (72 boys)


## Scaling in the Higher School Certificate

The HSC is based on a Standards approach. There are no preconceived ideas about how many students should be placed in a band of scores.

Before 2001, the HSC was norm-based: the number of students who would receive a particular range of scores was known before the exam was sat.

## Scaling in the Higher School Certificate

The quality of the candidature did not improve in 2001 with the start of the New HSC. Their marks were better but their relative positions remained unchanged. Therefore ATARs, which are a rank rather than a score, were unchanged.

Old HSC


New HSC


## Scaling in the Higher School Certificate

## The HSC course

The HSC course commences in Term 4 of Year 11
HSC results are based on

- internal assessment - formal tasks (50\% of final result)
- external assessment - HSC examinations (including performance and practical components) ( $50 \%$ of final result)

HSC examinations will take place in October and November with results available in December

## Scaling in the Higher School Certificate

HSC Course Assessment Schedule 2012

| Syllabus Components | Syllabus Weightings | Task la | Task 1b | Task $2$ | Task 3a \& 3b | Task 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline 2011 \\ \text { Term } 4 \end{gathered}$ | $\begin{gathered} \hline \hline 2012 \\ \text { Term } 2 \end{gathered}$ | $2012$ <br> Term 2 | $\begin{gathered} \hline \hline 2012 \\ \text { Term } 3 \end{gathered}$ | $\overline{2012}$ <br> Term 3 |
| $\begin{gathered} 9.2 \\ \text { Core } 1 \end{gathered}$ | 25\% | Skills 1a $(10 \%)$ |  | Written exam (5 \% ) |  | Written exam (10\%) |
| $\begin{gathered} 9.3 \\ \text { Core } 2 \end{gathered}$ | 25\% |  | $\begin{aligned} & \text { Skills 1b } \\ & (10 \%) \end{aligned}$ | Written exam (5\%) |  | Written exam (10 \%) |
| $\begin{gathered} 9.4 \\ \text { Core } 3 \end{gathered}$ | 25\% |  |  |  | Skills 3a $(15 \%)$ | Written exam (10 \%) |
| $\begin{gathered} 9.5 \\ \text { Option } \end{gathered}$ | 25\% |  |  |  | Skills 3b (15 \%) | Written exam (10 \%) |
|  | 100\% | $10 \%$ | $10 \%$ | $10 \%$ | $30 \%$ | $40 \%$ |

This schedule has $30 \%$ of marks completed by the mid - course exams, with balance of marks by end of Trial exam period.

## Scaling in the Higher School Certificate

| School <br> Assessment | Moderated Assessment | Exam <br> Mark | HSC <br> Mark |
| :---: | :---: | :---: | :---: |
| 75 | 79 | 75 | 77 |
| 75 | 79 | 72 | 76 |
| 80 | 83 | 90 | 87 |
| 86 | 88 | 88 | 88 |
| 73 | 78 | 79 | 79 |
| 66 | 72 | 710 | 72 |
| 85 | 87 | 90 | 89 |
| 68 | 73 | 88 | 81 |
| 930 | 920 | 88 | 90 |
| 91 | 91 | 920 | 92 |
| 78 | 82 | 90 | 86 |
| 89 | 90 | 90 | 90 |
| 68 | 73 | 79 | 76 |
| 90 | 91 | 84 | 88 |
| 67 | 73 | 76 | 75 |
| 77 | 81 | 81 | 81 |
| 88 | 90 | 88 | 89 |
| 650 | 710 | 75 | 73 |
| 88 | 90 | 88 | 89 |
| 77 | 81 | 87 | 84 |
| 85 | 87 | 85 | 86 |
| 70 | 75 | 77 | 76 |
| 86 | 88 | 85 | 87 |
| 85 | 87 | 82 | 85 |
| 85 | 87 | 79 | 83 |
| 86 | 88 | 88 | 88 |
| 81 | 84 | 79 | 82 |
| 86 | 88 | 85 | 87 |
| 82 | 85 | 82 | 84 |
| 78 | 82 | 82 | 82 |

## Assessment scores: <br> The school sends assessment scores to the Board of Studies for each student for each subject studied. In the example, the submitted scores range from 65 • to 93 .

After the HSC examination has been sat, the submitted scores are adjusted to match the results obtained in the HSC. The HSC exam marks ranged from 71 to 92 . The submitted scores are adjusted to range from 71 to 92.

Total Moderated Assessment = Total Exam Marks
Mean Moderated Assessment = Mean Exam Marks
The average of the Moderated Assessment score and the Exam mark for each student becomes the final HSC mark.

## Scaling in the Higher School Certificate

 Scaling in the Higher School Certificate


100 Demonstrates extensive knowledge and understanding of the range of concepts related to Demonstrates extensive knowledge and understanding of the range of concepts related to
health and physical performance. Comprehensively applies theoretical principles to design and evaluates specific strategies for improving health. Demonstrates a superior understanding of the interrelated roles and responsibilities of individuals, groups and governments in the management and promotion of health, Critically analyses movement and the range of factors that affect physical performance and participation. Provides relevant and accurate examples to justify complex arguments.
Clearly expresses ideas that demonstrate a thorough understanding of health and physical performance concepts. Identifies strategies for improving health and discusses the links between individual health behaviour, social issues and community health status.
Demonstrates a detailed understanding of the interrelated roles of individuals, groups and governments in the management and promotion of health. Demonstrates an understanding of the interrelationships between the various factors that impact on physical performance. Supports arguments thoroughly by using relevant examples and current information.
Demonstrates a clear understanding of the broad concepts that impact on personal health and physical performance. Relates strategies for managing the major causes of sickness and death to the contributing risk factors. Demonstrates a sound understanding of the roles of individuals, groups and governments in promoting health. Describes a range of factors that affect the quality of physical performance. Communicates information in a sive clear and logical way, providing some examples.

Uses basic definitions and facts when explaining health and physical performance concepts. Identifies the major causes of sickness and death and establishes that a healthy lifestyle is a desirable goal. Demonstrates an understanding of the need for government and community action in relation to promoting health. Identifies some relevant factors that influence physical performance. Provides basic support for the arguments presented.

Recalls some simple facts and writes brief descriptions. Demonstrates an understanding of elementary terms and recognises simple cause and effect relationships as they apply to health and movement. Outlines some factors affecting health and identifies relevant illness prevention measures. Demonstrates an understanding of general movement principles. Provides limited support for the arguments presented:
$\qquad$




## Scaling in the Higher School Certificate

The UAC website has the official information about calculation of ATAR and course selection at universities
www.uac.edu.au
(You can download a discussion paper on the 2011 HSC at www.uac.edu.au/publications/undergraduate/index.shtml)

## Scaling in the Higher School Certificate

## Australian Tertiary Admission Rank (ATAR)

The Board of Studies supplies information to the University Admissions Centre (UAC) to allow the ATAR to be calculated.

The ATAR is a rank. An ATAR of 99.95 suggests that a student beat $99.95 \%$ of the state.

A student's scores in each subject are converted to a common scale to allow the scores to be compared and added. This conversion involves comparing the performance of each student in a subject with their performance in other subjects to determine the "quality" of the candidature of each subject.

## Scaling in the Higher School Certificate

Table A3 Descriptive statistics and selected percentiles for HSC marks and scaled marks by course (continued)

| Course | Number | Type of mark | Mean | SD | Max. mark | P99 | P90 | P75 | P50 | P25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Industrial Technology | 4,582 |  | $36.0$ <br> 17.1 | $\begin{aligned} & 7.2 \\ & 9.7 \end{aligned}$ | $\begin{aligned} & 50.0 \\ & 40.6 \end{aligned}$ | $\begin{aligned} & 48.5 \\ & 38.2 \end{aligned}$ | $\begin{aligned} & 45.0 \\ & 31.4 \end{aligned}$ | $\begin{aligned} & 41.0 \\ & 24.3 \end{aligned}$ | $36.5$ <br> 15.8 | $\begin{array}{r} 32.0 \\ 9.3 \end{array}$ |
| Information Processes \& Technology | 4,140 |  | $35.8$ $21.5$ | $\begin{array}{r} 7.3 \\ 10.6 \end{array}$ | 48.5 <br> 46.9 | $\begin{aligned} & 47.0 \\ & 43.1 \end{aligned}$ | $45.0$ <br> 35.7 | $\begin{aligned} & 41.0 \\ & 29.6 \end{aligned}$ | $\begin{aligned} & 36.5 \\ & 21.4 \end{aligned}$ | $\begin{aligned} & 31.5 \\ & 13.2 \end{aligned}$ |
| Legal Studies | 9,087 | HSC <br> scaled | $37.3$ <br> 25.4 | $6.1$ $10.7$ | $49.5$ $50.0$ | $47.5$ <br> 45.6 | $44.5$ <br> 39.3 | $\begin{aligned} & 42.0 \\ & 33.9 \end{aligned}$ | $38.0$ <br> 25.7 | $\begin{aligned} & 33.5 \\ & 17.2 \end{aligned}$ |
| General Mathematics | 31,631 | HSC <br> scaled | $34.9$ $21.2$ | $\begin{array}{r} 6.8 \\ 10.1 \end{array}$ | $49.5$ <br> 45.4 | $47.5$ <br> 41.7 | $44.0$ <br> 35.4 | $\begin{aligned} & 39.5 \\ & 29.1 \end{aligned}$ | $35.0$ $20.7$ | $\begin{aligned} & 31.0 \\ & 13.1 \end{aligned}$ |
| Mathematics | 16,564 |  | $38.7$ $30.9$ | $\begin{aligned} & 7.1 \\ & 9.5 \end{aligned}$ | $\begin{aligned} & 50.0 \\ & 50.0 \end{aligned}$ | $\begin{aligned} & 48.5 \\ & 46.8 \end{aligned}$ | $\begin{aligned} & 46.0 \\ & 42.3 \end{aligned}$ | $\begin{aligned} & 43.5 \\ & 38.3 \end{aligned}$ | $\begin{aligned} & 40.0 \\ & 32.2 \end{aligned}$ | $\begin{aligned} & 35.5 \\ & 24.9 \end{aligned}$ |
| Mathematics Extension 1 | 8,823 |  | $40.8$ $39.5$ | $\begin{aligned} & 6.6 \\ & 6.8 \end{aligned}$ | $\begin{aligned} & 50.0 \\ & 50.0 \end{aligned}$ | $49.0$ <br> 48.8 | 47.5 <br> 46.6 | $46.0$ <br> 44.4 | $42.0$ <br> 40.9 | $\begin{aligned} & 37.0 \\ & 36.3 \end{aligned}$ |
| Mathematics Extension 2 | 3,439 |  | $41.9$ <br> 43.2 | $\begin{aligned} & 5.4 \\ & 4.8 \end{aligned}$ | $49.5$ <br> 50.0 | $\begin{aligned} & 48.5 \\ & 49.1 \end{aligned}$ | $\begin{aligned} & 47.0 \\ & 47.4 \end{aligned}$ | $45.5$ <br> 46.2 | $43.5$ <br> 44.3 | $\begin{aligned} & 39.5 \\ & 41.5 \end{aligned}$ |

The scaled scores are different each year - there are no preconceived values assigned

## Scaling in the Higher School Certificate

## Subjects should not be chosen because they are "scaled up":

If a boy scores 90 in Subject A and this is "scaled down" to 80, this is still better than scoring 60 in Subject B which is "scaled up" to 70

Boys should select subjects based on interest or plans for the future Boys are able to achieve a high ATAR score in subjects which are "scaled down"

## Scaling in the Higher School Certificate

A student's ATAR score is determined by taking the 2 best units of English and then adding the best 8 units remaining.

A student receives the following scaled scores in his HSC:

English Advanced 84
English Extension 144
Mathematics 87
Mathematics Extension 146
Physics 91
Chemistry 88
Economics 86

## Scaling in the Higher School Certificate

The scores are considered on a per unit basis:

English Advanced 42
English Advanced 42
English Extension 144
Mathematics 43.5
Mathematics 43.5
Mathematics Extension 146
Physics 45.5
Physics 45.5
Chemistry 44
Chemistry 44
Economics 43
Economics 43

## Scaling in the Higher School Certificate

The scores are grouped as English and other:

English Extension 144
English Advanced 42
English Advanced 42

Mathematics Extension 146
Physics 45.5
Physics 45.5
Chemistry 44
Chemistry 44
Mathematics 43.5
Mathematics 43.5
Economics 43
Economics 43

## Scaling in the Higher School Certificate

The two highest scores for English are used:
English Extension 144
English Advanced 42
Any additional English scores join the other subjects:
Mathematics Extension 146
Physics 45.5
Physics 45.5
Chemistry 44
Chemistry 44
Mathematics 43.5
Mathematics 43.5
Economics 43
Economics 43
English Advanced 42

## Scaling in the Higher School Certificate

These scores are used to calculate the boy's ATAR score :

English Extension 144
English Advanced 42

Mathematics Extension 146
Physics 45.5
Physics 45.5
Chemistry 44
Chemistry 44
Mathematics 43.5
Mathematics 43.5
Economics 43
Economics 43
English Advanced 42

This student's ATAR score would be 441 (out of 500)

## Scaling in the Higher School Certificate

| ATAR | Lowest aggregate |  |  |
| :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 |
| 99.95 | 478.9 | 476.2 | 476.5 |
| 99.50 | 457.7 | 455.2 | 456.2 |
| 99.00 | 446.6 | 444.8 | 445.6 |
| 98.00 | 431.3 | 430.0 | 432.2 |
| 95.00 | 401.5 | 403.0 | 403.7 |
| 90.00 | 367.4 | 369.6 | 371.2 |
| 85.00 | 340.0 | 341.5 | 343.7 |
| 80.00 | 315.1 | 317.6 | 318.9 |
| 75.00 | 292.4 | 295.5 | 295.7 |
| 70.00 | 271.0 | 273.4 | 274.1 |
| 65.00 | 250.4 | 252.5 | 252.9 |
| 60.00 | 231.1 | 231.7 | 233.1 |
| 55.00 | 212.1 | 211.6 | 213.0 |
| 50.00 | 193.1 | 192.4 | 193.5 |

The cut-off scores are different each year - there are no preconceived values assigned

