VAR Grade for Windows

VAR Grade for Windows (VGW) is a sophisticated grading and attendance program.   It can be used for grading, attendance, seating charts, plotting, statistics, **database items**, and report writing.

The program can hold 16,000 students, 16,000 **sections** of students, and 2,000 **tasks** (assignments). VGW can hold 240 attendance days, two seating charts per section of students, four different grading systems, and 200 different database items!   In other words, VGW can handle an unlimited amount of data.

To get help on using **VAR Grade for Windows**, click on an underlined topic below:

First use of the program
Starting the program   **Classes on disk**
Entering students   **Entering data**

Grading systems
Defining tasks   **Manipulating tasks**
Database items
Attendance   **Seating charts**

Printing and reports   **Exporting data**
Analyzing grades   **Plots**

International support   **Options**
Support

First use of VGW

VAR Grade for Windows (VGW) has lots of features.   You will probably only use some of them.   Below is a quick guide to what you first need to do when starting the program.   We also would like to remind you of the tutorials in the program:

- Select "Help".
- Select "Tutorial" to run the tutorials.

Hints

The first time the program starts, a Hint screen appears.   It suggests some things that will help you get started.   This screen only appears the *first* time the program is started.   In addition to that screen, many areas of the program also have Hint screens.   These will pop up only the first time you enter that part of the program.   These hint screens are only introducing the capabilities of the program.

Every time the program starts, a small hint of   the day will appear.   These hints are designed to increase your knowledge of VGW.   When these daily hints appear, you can also read the others by clicking on "Next hint".   If you want, you can turn off all hints by clicking on "Turn off hints".   Selecting "Help Hints" on the main menu will turn the hints back on.

Adding students

The first thing you will probably want to do is to add students to your class.   There are several ways to do this.   The three most common are discussed below:

- Typing them in:

    ° The most obvious way to add names is to click on the name column, then to type in the student names.   This works well if you have 40 or fewer students.

- Quick typing:

    ° A faster method is to select "Edit"
    ° Select "Quick entry of students".
    ° You can also select this method by pressing the ALT and Q keys simultaneously (<AltQ>).
    ° For this method, you just type in the name, then press <Enter>.   The name will appear on the list above.   If you typed the name in error, select the erronious name, then press the "Reject" button.
    ° When you are finished, select "OK".

- Importing names:

    ° If you can get a file with the student names in it, VGW can import the data.   You can import either flat files or comma and quote files.
    ° Select "File"
    ° Select "Import".

See also

Entering students

Adding tasks

The next thing you probably want to do is to add some grades.   You must first define one or more tasks. To define a task, you first need to determine whether the assignment had letter or number grades.

- If it had letter grades, select "Task".
- Select "Define".
- Select "Letter".
or
- If it had number grades, select "Task".
- Select "Define".
- Select "Number".

- For either, you need to give the task a number, so you can more easily reference it.   You also need to give it a name ("First Exam", or "Homework 9/4").   If it is a number task, you need to specify how many points the assignment was worth.

You can have any number of number or letter grades.   In addition, you can have extra credit tasks, too. Last, you can sum, average, weight, etc. these scores by defining more tasks.   See **Defining tasks** for more information.

Adding attendance

After adding tasks, you may want to add attendance.

- Select "Attendance".
- Select "Define dates".
- You will be asked for the days of the week that the class is held, then the starting and ending dates for the class.   VGW doesn't know about holidays, so you may have to delete some dates after you define them. See **Attendance** for further details

Add other data

If you use an unusual grading system, you want to set that up before you start defining too many tasks. See **Grading systems**.

Seating charts can be defined to make it easier to take attendance.

Starting the program

VAR Grade for Windows (VGW) is started by clicking on the program icon.   After VGW starts, it will show the "Main Window", the "Main Menu" across the top, and a **spreadsheet style** data entry screen.   Below is information on several options about you can alter how the program starts.   If this is the first time you have used VGW, try clicking on **First Use of the Program**.

Setting up the VGW Program Properties

If you want VGW to always start the same program, one way to do this is to set up the program properties as follows:

- When in the Windows Program Manager, click on "File".
- Select "Properties".
- On the "Command Line", add the full path name of the file after VGW.EXE.   For example, to start a class called DRAMA101 in the directory DRAMA, the command line might read "C:\VGW\VGW.EXE \ DRAMA\DRAMA101".
- Click on "OK" to save the changes.

Dragging and dropping classes

If you want to start VGW from the File Manager, press the left mouse button class file that ends in PAR (e.g., DRAMA101.PAR), hold the button down, and drag the class to VGW.EXE.   Then release the button.

After the class has loaded

Whichever method you use to load a class, the screen will default to the screen size of the class the last time you used the program.   If you maximized the window, the class will open maximized.   Otherwise, VGW will start using the same size window as previously.   In most cases, you want to then maximize the program by clicking the up icon in the upper right of the main window.

Entering students

There are several ways to enter students into VGW.   Below is information on several of them.   A student must have a name before any student data is saved.   If you use IDs but not names, enter the ID in the Names column.

Typing in from the class data entry screen

If there are empty cells in the Name column, you can enter new names.   Just move the cursor to the cell and type in the name.   If a name already exists, it will change to the new name.   After you exit the window, or use the data from the window, for example plotting, the data is saved.

If you want to insert a name, you can select the "Insert row" or "Add row" buttons.   Add row adds a row for a new student at the end of the current list, while insert row adds wherever the cursor is located.

Note: If you have selected the "Prevent alteration of student names" option on the Edit Options screen, you will not be able to enter new student names by this method.

Entering names on the individual data entry screen

If you want to add a new student while changing individual student data, you can select the Insert menu choice.   This will add the new student.   This method is good for adding a couple of students, but will get tedious if you are adding lots of them.   Like the class data entry method, if you have selected the"Prevent alteration of student names" option on the Edit Options screen, you will not be able to enter new student names by this method because you cannot enter a name for the student.

Quick entry of student names

- Select "Edit".
- Select "Quick entry of students".
or
- Press "<AltQ>".

- If you use multiple sections of students, you are asked for the section number of the new students.
- A screen pops up that lets you quickly type in lots of students (the Add Students screen).   You enter students by typing in their names, then pressing "<Enter>".   The name you typed moves to the end of the list on the top of the screen.   You continue as long as you need.
- If there is a student name that is incorrect, you can select that student from the list, then press the "Reject" button.
- When you are finished, you can select the "OK" button.

Quick entry of student names and IDs

This method works like the previous one, except that you enter both names and IDs.   Pressing "<Enter>" in the name field moves the cursor to the ID field, and pressing "<Enter>" there moves the name to the top list and the cursor back to the name field.

Importing names

There are four ways to import names into the class.   They can be found on the "File Import" menu choices.   See **Importing data**.

See also

Edit options

Individual data entry
Section data entry

Importing data

There are four ways to import names into the class.   They can be found on the "File Import" menu choices.

For all these options, if you want the names added to the class, the File Import Option should be set to "Add students when importing".   Otherwise, student data can be added, but no new students.

Comma and quote files

Comma and quote files are ones where the data is separated by commas.   If the data has a comma in it, double quotes are used to keep the data together.   For example, one line might read:

> "Mendel, Gregor", 100, 50, B+, "Peas are great!"

This example would have five pieces of data, including what appears to be a name, two number grades, one letter grade, and one database field.   To import a file like this, you just select the file.   VGW then interprets the fields.   You can force the correct interpretation of the file by adding the field information on the first line.   The manual gives further details.

Flat files

Flat files have data in columns.   The columns are separated by spaces or tabs.   For example:

> Mendel, Gregor <tab> 100 <tab> 50 <tab> B+ <tab> Peas are great!
> Mendel, Gregor   100   50   B+   Peas are great!

This example would have five pieces of data, including what appears to be a name, two number grades, one letter grade, and one database field.   In this example, the data on the first line is separated by tabs, while the second line is separated by spaces.   If the data is separated by spaces, you should select this option (Import flat files).   If the data is separated by tabs, the next option is easier (Automatic flat file imports).

After selecting the flat file, you need to tell the program the type of data and where it is located.   You first select the types of data, and it's order.   Next, you tell the program where each column is located.   You click the left mouse on the correct columns.

Automatic flat files

See the previous method for a description of flat files.   The automatic flat file import tries to make sense of a flat file.   It does not ask you what type of data is located in which column.   For this reason, they work best if you use the first line to tell the program which data is where.   See the manual for further details.

One task scores

This option is similar to the flat file import, but only one task score is in the file.

Import options

When importing data, you can set an option prevent new students from being added.   If the option is set, data is added, but not new students.   This lets you have a file of data from more than one class that you can import into each of several classes, and only the appropriate data will be added to each class.   You set the option with:

- Select "File".
- Select "Import".
- Select "Options".

See also

Exporting data

Defining tasks

Tasks are assignments and combinations of assignments.   In VGW, you can use letter or number grades, and can also have extra credit.   These three categories are tasks that can be used to enter grades.   The other tasks use one or more tasks to manipulate the grades.   For example, you can sum, average, or weight grades.

When defining tasks, you need to give each task a number and a name.   It is best if the names are all different from each other.   On some printouts, the numbers are used as references.   The numbers do not need to be consecutive, and, in some cases, it is better if they are not.   For example, you can assign homework with task numbers 1 to 20, tests with 21 to 30, and term papers with   31 to 40.   This lets you keep track of the assignments more easily.

Click on the task type below to get further information:

Number   **Letter**   **Extra credit**

Sum   **Average**   **Percentage**

Highest   **Weight**   **If**   **User**

Attendance   **Attendance extra credit**   **Attendance total**

Final

See also

Altering or moving tasks
Manipulating tasks
Task options

Number tasks

Number tasks are tasks that use numbers as grades.   The numbers can range up to 1,000,000 points, and can have decimals.

Defining a number task

- Select "Task".
- Select "Define".
- Select "Number".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task and the total points.   The total points are used in calculations of percentages.

Grades that are higher than the total points are rejected by the program unless you turn off the checking. To turn off the data checking:

- Select "Edit".
- Select "Options".
- Click on "Verify scores when entered" (it should be unchecked).

Excusing grades

You can excuse grades by entering a number below the fewest allowed points (normally set at 0).   For example, if a student was excused from an assignment because of illness, you could enter a score of -1. The score will always be treated like an unentered score, and not used for averages, weights, etc.

See Also:

Defining tasks
Extra credit tasks
Letter tasks

Letter tasks

Letter tasks are used for entering grades that are letter grades.   You can use any grading system you want for the letter grades, but you must set up the grading system first.   See **Grading systems**.

Defining a letter task

- Select "Task".
- Select "Define".
- Select "Letter".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.

See Also:

> **Defining tasks**
> **Number tasks**
> **Extra credit tasks**

Grading systems

VAR Grade for Windows (VGW) allows almost any grading system. You can have up to four simultaneous grading systems with up to 50 different grades categories in each system. Each grade name can have up to three characters. Besides grade names and values, you can also assign grade cutoffs. These are the minimum score needed to obtain that particular grade.

Checking the grade system

In many cases, the program will default to the grading system you desire. However, in many cases, this isn't true. If you are first starting VGW, you should check to make sure the default grading system matches the one you want to use.

- Select "Grade".
- Select "Grade names and values".
- Select "Define your own sytem".
- The first screen tells you the number of grading systems, the highest grade value, and the name of an unentered grade. If you select "OK", the next screen tells you each of the current grades and grade values.

Defining a new grading system

If you use a standard grading system, defining a new one is easy.

- Select "Grade".
- Select "Grade names and values".
- There are several standard grading systems listed. Selecting one will change the previous system to your new system.

If you use an unusual grading system:

- Select "Define your own sytem".
- You need to specify the number of grade systems, the maximum grade value, and the grade name of an unentered score. In the normal US system, these would be, respectively, "1" grading system, "4.0" (the value of an A), and "I" (incomplete). In addition, there is another option. This is whether the grade values and grade cutoffs should be the same. For the standard US system, this would set the cutoff for an A to be 4.0, etc. Select "OK" when you have finished entering the desired values.
- A second screen will allow you to enter the grade names and values for each of the grading systems. Note that names can have up to 3 characters.

Note: An alternative system that is frequently used is to use 93 for an A, 90 for an A-, etc. If you mix letter and number grades, this alternative system may be a better system for you. One word of caution: if you set an F equal to 0, the average of an A and an F would be 46.5. This is not the usual value for a C! A value of 53 for an F would give a C average. You could define an additional grade of F- or G and give it a value of 0.

Grade values

Grade values are the numbers used when calculating grades. They are different from grade cutoffs. The standard grade value for an A is 4.0. If you use number grades, and scale the scores to a 100 point scale, a cutoff of 4 for an A would probably give every student an A. Grade cutoffs are used by Final tasks.

You can set the grade values, without changing the names.

- Select "Grade".
- Select "Grade names and values".
- Select "Change only the grade values".

Grade cutoffs

Grade cutoffs are the numbers used when assigning grades.   They are different from grade values.
Grade cutoffs are used by Final tasks.   It is recommended that you assign cutoffs before defining any
Final tasks.

- Select "Grade".
- Select "Grade cutoffs".
- Select "Assign grade cutoffs".

To remove cutoffs, you need to select "Remove grade cutoffs".

See also

<u>Analyzing grades</u>
<u>Final tasks</u>

Extra credit tasks

Extra credit tasks are tasks that use numbers as grades, but, when added to other scores, do not change the total points of the sum.   Extra credit can use numbers up to 1,000,000 points, and can have decimals.

Defining an extra credit task

- Select "Task".
- Select "Define".
- Select "Extra credit".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task and the total points.   The total points are used only for data entry.

Grades that are higher than the total points are rejected by the program unless you turn off the checking. To turn off the data checking:

- Select "Edit".
- Select "Options".
- Click on "Verify scores when entered".

See Also:

Attendance extra credit tasks
Defining tasks
Letter tasks
Number tasks

Sum tasks

Sum tasks are tasks that add up the points of other tasks.   For example, you can define a sum task to add up all the homework points.   Because they sum scores, letter scores that are summed are summed with their grade *values*.

Defining a sum task

- Select "Task".
- Select "Define".
- Select "Sum".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.
- Last, you are asked which tasks to sum.   You select the tasks by clicking on the task or tasks, then clicking on the "Select" button, or by double-clicking on the task.   You can also "Select All".   This button will select all the currently defined tasks.   To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use.   For example, if you define the average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.
- After you have selected the tasks to sum, click on "OK".

See Also:

Defining tasks
Average tasks
Percentage tasks

Average tasks

Average tasks are tasks that average the points of other tasks.   For example, you can define an average of all the book reports.   Because they average scores, letter scores that are averaged are averaged with their grade *values*.

To define an average task

- Select "Task".
- Select "Define".
- Select "Average".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.
- Last, you are asked which tasks to average.   You select the tasks by clicking on the task or tasks, then clicking on "Select".   You can also Select All.   This button will select all the currently defined tasks.   To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use.   For example, if you define the average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.
- After you have selected the tasks to average, click on "OK".

See Also:

    Defining tasks
    Sum tasks
    Percentage tasks

Percentage tasks

Percentage tasks are tasks that add up the points of other tasks, then calculate the percentage.   For example, you can define a percentage task to calculate the percentage of all the test scores.   Because they calculate a percentage, letter scores that are used are calculated with their grade *values*.

Defining a Percentage task

- Select "Task".
- Select "Define".
- Select "Percentage".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.
- Last, you are asked which tasks to use.   You select the tasks by clicking on the task or tasks, then clicking on "Select".   You can also Select All.   This button will select all the currently defined tasks.   To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use.   For example, if you define the average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.
- After you have selected the tasks to use, click on "OK".

See Also:

Defining tasks
Average tasks
Sum tasks

Highest tasks

Highest tasks are used to discard scores.   The remaining scores can be summed, averaged, or have the percentage calculated.   It is very common for the lowest one or few grades be discarded, and these tasks make the grade calculations easy.

Defining a highest task

- Select "Task".
- Select "Define".
- Select "Highest".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for three pieces of data.   First, the name of the task.   Second, how many of the lowest scores to discard.   Third, you need to tell the program to calculate averages, sums, or percentages.
- Last, you are asked which tasks to use.   You select the tasks by clicking on the task or tasks, then clicking on the "Select" button.   You can also "Select All".   This button will select all the currently defined tasks.   To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use.   For example, if you define the average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.
- After you have selected the tasks to average, click on "OK".

Example: You have ten homework assignments, but only require that eight be turned in.   You can define a highest task that sums (or averages, or calculates the percentage of) the ten homeworks, but discards two.   Only the highest eight scores are counted.

See Also:

Defining tasks
Weight tasks

Weight tasks

Weight tasks are tasks that weight other scores.   The weight tasks in VGW use the final weights you want, so you don't have to calculate the numbers you need.   They can also discard scores like **Highest tasks** do.

Defining a weight task

- Select "Task".
- Select "Define".
- Select "Weight".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for two pieces of data.   First, the name of the task.   Second, the total points for the task.   In most cases, you want 100 total points (and hence the calculation is equivalent to a percentage).
- Next, you are asked which tasks to use.   You select the tasks by clicking on the task or tasks, then clicking on the "Select" button, or double clicking on the task.   You can also "Select All".
- After you have selected the tasks to use, click on "OK".
- Last, you are asked for the weights to use and the number to discard.   If you discard tasks, the weights are readjusted for each student.   The weights are *relative* weights.   This means that if you enter, for three tasks, 40, 40 and 20, or 0.4, 0.4, and 0.2, or 2, 2, and 1, the scores will end up with the same values.   If each task is to be weighted equally, they can all have weights of 1.0.

Example: If, on your course syllabus, you say that tests are 60% of the class, homework 20%, and a term paper is 20%, you would enter the weights as 60, 20, and 20, irregardless of how many points each task was worth!

See Also:

Defining tasks
Highest tasks

If tasks

If tasks are tasks that filter scores on other tasks.   If the criterium is met, the score is passed, otherwise the score is a 0 (or the worst letter grade).   If tasks work on any type of task.

Defining an If task

- Select "Task".
- Select "Define".
- Select "If".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.
- Third, you are asked to select the task scores you want to filter.
- Next, you are asked for the criteria to use.   There are two parts to this.   You need to enter a value. If the task you selected uses letters (Letter or Final tasks), you enter a letter grade.   Otherwise, you select a number value.   Also, you need to select whether to "pass"   the high, low, etc. values.   Pass means the scores are accepted, otherwise the score ends up with a 0 or the lowest letter grade.

Example: You require at least a 70% on the homework to pass a class.   Define an if task that uses the homework average as the task to use, with the criteria "greater than or equal to" a value of 70.   If the value of the homework is below 70, a 0 results.

See Also

Defining tasks

User tasks

User tasks are tasks that let you enter spreadsheet style commands to algebraically manipulate grades.

Defining a user task

- Select "Task".
- Select "Define".
- Select "User".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked for the name of the task.
- Last, you are asked to define the task.   You can use any tasks in the definition, as well as the four mathematical symbols: "*" is times, "/ " is divide, "+" is add, and "-" is subtract.   In addition, you can use parentheses.   Parentheses are given priority, then the mathematical operations.   The expression is evaluated from left to right, so you may need to use parentheses to produce the result you want.   Square brackets are used to define a task number, so "[1]" means the score on task 1.   A percent sign before the number in the square bracket means the percent on that task.   For example "[%1]" means the percent on task 1.

Example: You want an average of tasks 1 and 2.   To do this:

- Click on the Left parenthesis ("(").
- Click on task 1, then "Select".
- Click on "ADD".
- Click on task 2, then "Select".
- Click on the right parenthesis (")").
- Click on "DIV".
- Type in "2".   The definition should look like: ([1]+[2])/2
- Click on "OK".

You could also have typed in the definition.   Note that if parentheses were not used, the same result would occur.   However, that is not always the case.   If you want to calculate the average percentage on tasks 1 and 2, the definition should look like: ([%1]+[%2])/2.   The manual has more examples.

See Also:

Defining tasks

Final tasks

Final tasks are used for assigning letter grades.   They use the score in another task for the assignment, using the **grade cutoffs** you have defined.   If you haven't set up your grading system, you should do so before defining final tasks.   See **Grading systems** on how to do this.

When they are defined, final tasks use the cutoffs that have already been defined.   If you haven't done this, the cutoffs are undefined, and the students either receive the top grade or an unentered grade.   You can later change the cutoffs for that task by selecting "Grade", then "Assign final grades".

Defining a final task

- Select "Task"
- Select "Define".
- Select "Final".
- You are first asked for the number of the task.   Select a number by typing it in.
- Next, you are asked for the name of the task.
- Last, you are asked to select the task to use for assigning grades.

Example: You grade by percentage and want to assign final grades.   First, define a percentage task that determines the percentage of the grades in the class.   Next, define a Final task.   Use the percentage task as the task to use for assigning grades.   If you haven't set up a grading system, you then need to assign grades as described above.

See Also:

Defining tasks

Attendance tasks

Attendance tasks are tasks that convert attendance into numbers.   These numbers can then be used in determining grades.   Each type of attendance can have it's own value.   These are defined on the "Attendance", then "Values" part of the program.   Furthermore, you can discard one or more attendance days when calculating the attendance.

To define an attendance task

- Select "Task".
- Select "Define".
- Select "Attendance".
- You are first asked for the number of the task.   Select a number by typing it in or using the mouse.
- Next, you are asked for three types of data.   First, you need to enter the name of the task.   Second, you need to enter the total points for the task.   Third, you are asked for the number of attendance days to discard.   This last value lets you excuse students for one or more days.
- Next, you are asked for the attendance days to use for the calculations.

Note that attendance tasks use the attendance vaules in the calculations.   For example, if the attendance value of "present" is 2 and "absent" is 0, and the student was present ten times and absent twice, the score would be 20/24.   If you allowed three absences, the two absences and one present would be discarded, with a resulting score of 18/18.   These ratios are the attendance points divided by the maximum attendance points.   To get the final score, the program multiplies the ratio times the total points you specified for the task.

See Also:

Defining tasks
Attendance
Attendance extra credit tasks
Attendance total tasks

Attendance

Attendance can be entered for up to 240 days.   In addition, you can have up to 13 different attendance types such as present, late, and absent.   To use the attendance, you need to tell the program which days the class is held.

Defining attendance days

There are two major ways to enter attendance days.   First, you can enter them using a calendar.   Second, you can enter them one by one.   These are described in **Defining attendance days**.

Attendance types and values

There are 13 different attendance types.   Each type has a name, up to 2 characters that are used to enter the attendance, and a value.   The value is used only for attendance tasks.   See **Attendance types and values** for more information.

Removing attendance

To remove attendance days:

- Select "Attendance".
- Select "Remove".
- Select the ones to remove by clicking on the date, then "Select".   After the ones you wish to remove are listed on the bottom list, select "OK".

Exporting attendance days

If you teach more than one class in a term, your classes usually meet the same days.   You can export the days from one class to another.   This lets you set up the days in one class and use them in all your classes.

- Select   "Attendance".
- Select   "Export dates".
- Select   the class that receives the dates.

Entering attendance

There are two major ways to enter attendance: by section or class and by individual.   These are the two major data entry screens in VGW.   In addition, you can enter data from the seating charts.   See **Individual data entry**, **Seating chart attendance**, and **Section data entry**.

In all cases for entering data, you enter the two letter codes that you specify on the "Attendance Options" screen.

See also

> **Attendance extra credit tasks**
> **Attendance tasks**
> **Attendance total tasks**
> **Date options**
> **Entering data**
> **Seating charts**

Attendance extra credit tasks

Attendance extra credit tasks are tasks that convert attendance into numbers.   These numbers can then be used in determining grades.   Like extra credit tasks, if they are summed or averaged, they do not affect the total points.   Each type of attendance can have it's own value.   Furthermore, you can discard one or more attendance days when calculating the attendance.

To define attendance values

- Select "Attendance".
- Select "Values".

To define an attendance extra credit task

- Select "Task".
- Select "Define".
- Select "Attendance Extra credit".   You are first asked for the number of the task.   Typing in a number.
- Next, you are asked for three types of data.   First, you need to enter the name of the task.   Second, you need to enter the total points for the task.   Third, you are asked for the number of attendance days to discard.   This last value lets you excuse students for one or more days.
- Next, you are asked for the attendance days to use for the calculations.

Note that attendance tasks use the attendance values in the calculations.   For example, if the attendance value of "present" is 2 and "absent" is 0, and the student was present ten times and absent twice, the score would be 20/24.   If you allowed three absences, the two absences and one present would be discarded, with a resulting score of 18/18.   These ratios are the attendance points divided by the maximum attendance points.   To get the final score, the program multiplies the ratio times the total points you specified for the task.

See Also:

Defining tasks
Attendance
Attendance tasks
Attendance total tasks
Extra credit tasks

Attendance total tasks

Attendance total tasks are tasks that convert attendance types into numbers.   These numbers can then be used in determining grades.   This task doesn't use the attendance values, but instead just totals the type(s) you selected for all the attendance days.

To define an attendance total task

- Select "Task".
- Select "Define".
- Select "Attendance total".
- You are first asked for the number of the task.   Select a number.
- Next, you are asked to enter the name of the task.   Last, you are asked for the attendance types to use for the totals.

You can use attendance total tasks to keep a running count of attendance.   You can also use it, combined with the If tasks, to require certain types of attendance in your classes.

See Also:

Defining tasks
Attendance
Attendance tasks
Attendance extra credit tasks

Analyzing grades

A large number of analyses can be done on your grades.   You can use these analyses to analyze your teaching and exams, and to inform your students.

Assigning grades

Final grades can be assigned, or they can be automatically calculated in a final task.   The menu option "Grade", then "Assign final grades" is used to determine and assign final grades by hand.   See **Assigning grades**.

Adjusting grades

After assigning final grades, you may not feel that all the assigned grades were desirable.   For example, a student may have been sick, yet took a final exam.   If you used the grade on the final and assigned grades, the student would do worse than he or she should have done.   You can take the final grades and adjust them.   See **Adjusting grades**.

What ifs

You or your students may want to know what they have to receive on the last couple of assignments or exams to obtain a particular grade.   You can use the what if calculations to do this.   See **What ifs**.

Statistics

VGW can calculate a wide variety of statistics.   These values can be assigned and stored, or used for grading purposes.   They can also be used to adjust scores on exams or assignments.   See **Statistics** for more information.

Scaling grades

Scores can be adjusted by scaling, as well.   For example, you can add or subtract points from every student in a section or class.   See **Scaling grades** for more information.

Plotting

There are four major types of plots in VGW.   These include **histograms**, **correlations**, where scores on two tasks can be compared, **individual plots**, where the progress of a student can be followed, and **class plots** where an individual is compared to the class.

See also

Plots
Task options

Database items

Database items can hold student information like addresses, phone numbers, gender, and year in school. There are several types of database items.   The items can be used for sorting and filtering students, and can be printed on most printouts.

Database types

There are six types of database items: **string**, **memo**, **integer**, **date**, **boolean**, and **character**.   If you cannot decide which type to use, the string type is the most flexible.

Defining database items

- Select "DB".
- Select "Define".
- Select one of the six types.   For each, you need to specify the number and name of the item.   For string and memo items, you need to specify the maximum number of characters you will need.   For character items, you need to specify the valid characters.

Manipulating database items

Database items can be redefined (altered), renamed, moved,   cleared, deleted, or the values transfered to a task.   See **Manipulating database items**.

Filtering with database items

Database items can be used for filtering students before plotting.   See **Selecting students**.

Sorting using database items

Students can be sorted various ways, including by database values.   See   **Sorting** .

See also

Plots
Printing reports

Altering or moving tasks

Renaming tasks

- Select "Task".
- Select "Alter or move".
- Select "Rename".
- Next, select the task you wish to rename.
- Finally, enter the new name of the task.

Moving tasks

Moving tasks is equivalent to copying it to a new place, then deleting the old one.

- Select "Task".
- Select "Alter or move".
- Select "Move".
- Next, select the task you wish to move.
- Finally, select the new number of the task.

The task is moved, and all task definitions are corrected for the new position of the task.

Copying tasks

- Select "Task".
- Select "Alter or move".
- Select "Copy".
- Next, select the task you wish to copy.   Finally, select the new number of the task.

The task and all the student scores are copied.   If you copy to a number that already exists, you are asked whether to replace the existing task.

Transfering task definitions

Transfering definitions copies the definition of one task into a second one.   The second task doesn't need to already be defined.

- Select "Task".
- Select "Alter or move".
- Select "Transfer definitions".
- Next, select the task you wish to copy.
- Finally, select the number of the new task.

The task definition is then copied.   If the task is a letter, number, or extra credit task, the students scores of the new task are unentered.   Otherwise, the scores are calculated just like the old task.

Transfering scores

Transfering scores copies the score of one task into a second one.   The task that receives the scores must be a letter, number, or extra credit task.   Neither task definition is altered.

- Select "Task".
- Select "Alter or move".
- Select "Transfer scores".
- Next, select the task you wish to transfer from.

- Finally, select the number of the task that receives the scores.   The student scores are then copied.

Transfering task information to a database item

Transfering scores to a database item copies the score of one task into a database item.   The item that receives the scores can be any defined database item.   Therefore, be sure to define the desired database item before transfering score to it.

- Select   "Task".
- Select   "Alter or move".
- Select   "Transfer scores to db item".
- Next, select the task you wish to transfer from.
- Finally, select the database item that receives the scores.

The student scores are then copied.   There is an analogous method that transfers database values to task scores.   See **Database items**.

See also

Defining tasks
Manipulating tasks

Manipulating tasks

After tasks have been defined, you may want to change the definitions, move the tasks, or remove them. Some of these operations are listed below:

Viewing definitions

You can see the complete definition of current tasks.   If the program is giving different scores scores than you expect, you should first check to make sure the definition is what you expect.   Note that these definitions can be printed.

- Select "Task".
- Select "View definition".
- Then select the ones you want to view.

Redefining tasks

To redefine a task, you just need to define a new task with the old number.

Example:
> If you want to change the point total for a number task:
> ° Select "Task".
> ° Select "Define".
> ° Select "Number".
> ° Next, select the task you wish to redefine.
> ° The previous name and point total are shown.   Move to the point total and change to a new value.
> ° You will be asked whether to replace or insert before the task.   Select "Replace".
> ° When asked whether to clear the student scores, select "No".

Clearing scores

Student scores for a particular task can be deleted.   This sets the scores to unentered.

- Select "Task".
- Select "Clear scores".

Removing tasks

Tasks can be deleted.   When they are removed, all the student and task information is removed.

- Select "Task".
- Select "Remove".

Exporting tasks to another class

If you set up one class, and expect another class to use the same number and type of assignments, you can export the tasks to another VGW class.   All parts of the definition are exported.   However, if you export an average without also exporting the tasks that are averaged, you may find that the student scores are not what you expected.

- Select "Task".
- Select "Export tasks".

Altering or moving tasks

You can rename, move, copy, transfer scores or task definitions, and transfer scores to a database item. See **Altering or moving tasks**.

See also

Altering or moving tasks
Defining tasks

Manipulating database items

Renaming items

- Select "DB".
- Select "Rename".
- You then select the database item to rename, and enter a new name.

Redefining items

After defining a database item, you may decide that you used the wrong database type or a string or memo length that is too short.   If that is the case, you can redefine the item without losing data.

- Select "DB".
- Select "Alter".
- You then select the database item to alter.
- Next, you need to select the new type.

No matter which type the current data is, and no matter what the new data type is, VGW will try to convert it.   It does this by converting all data into a string, then into the new data type.   For example, a date would be converted to a string that reads xx/xx/xx.   It would then be converted to the new type.   If the new type is a string, the dates will look the same.   If the new type is an integer, the data would be undefined, hence blank.   If the new type is a boolean, the date would be converted to "N", as the first character isn't a "Y".   All types can be converted to strings or memos without a loss of data (assuming the string length is long enough to hold the data).   However, conversion to other data types can be a problem.

If you convert to a string or memo, you are asked for the new length.   If you convert to a character, you are asked for the valid characters.

Transfering data to tasks

Transfering data to a task is similar to the previous discussion on redefining database items.   The difference is that the data is converted to a floating point number or to letter grades.   Before you convert the data, you need to make sure the task that receives the data has already been defined.

- Select "DB".
- Select "Transfer db values to task".
- You then select the database item to transfer and the task to receive the data.   *Warning*:   Unless the database item is entirely numbers or grade names, the conversion will fail.   An integer database type will convert to a number task, but a boolean or a date will not.

Moving items

- Select "DB".
- Select "Move".
- Next select the item to move.   You then select where to move the item.   Choosing a number higher than the last defined item will move the item to the end of the list.

Clearing data

Clearing data leaves the item still defined, but the student data is cleared.

- Select "DB".
- Select "Clear".

Deleting items

Deleting data completely removes the item and student data.

- Select "DB".
- Select "Delete".

See also

Database items

Selecting students

In many places of the program, you can select which students to use.   You have complete flexibility over which students to use.   There are four basic options: all students, no students, pick students, and students who match values.   The first two are obvious, but the other two are described below.

Pick students

You can select which students to use.   If you select this option, you are shown a list of all students that are available.   By selecting the students you want, and rejecting those you don't, you can use only those students that you want to use.

- When the list of students is shown, you select a student by double-clicking on a student in the top list, or single-clicking and clicking on the "Select" button.
- When the list of students is shown, you reject a student by double-clicking on a student in the bottom list, or single-clicking and clicking on the "Select" button.

Matching values

This option searches through the value you select for matching students.   You can match database items, task scores, names, and IDs.   If you select it, you should also select an item from the bottom list of the data type to match.

If you select matching tasks or database items, you need to select the item for the matches.

You then select students above, below, equal, or between values by entering the value and how to treat the value (above it, below it, etc).   If you select below, above, or equal to a value, you just need to enter one value.   For between values, you need to enter both the high and low acceptable values.   VGW then checks each student to see if they match your criteria, and, if the criteria are met, selects that student.

See also

Ignore students
Selecting ranges

Printing and reports

In **VAR Grade for Windows (VGW)**, there are many ways to print data and plots.   Most of the printouts the program has defined allow a lot of customization.   Besides all those printouts, you can design your own report forms.

Writing class data

This part of the program writes data with the students listed along the left side of the paper and the data in columns extending across the page.   Most of the major data can be printed this way: tasks, attendance, database items, missed assignments, missing attendance, attendance summaries, and attendance totals. Either the whole class or individual sections of students can be printed.   See **Writing class data**.

Writing data by name

This part of the program writes data of one student.   The student is listed at the top of the page, with the rest of the data in one column down the page.   The same types of data that is printed in Writing class data can be printed by name.   See **Writing individual data**.

Grids

Empty grids that are useful for entering data can be printed.   See **Grids**.

Reports

If the reports in the program aren't sufficient for your needs, you can write your own reports.   Rreport forms are very powerful, but take extra work on your part.   See **Reports**.

Printout options

You can change the wording of many printouts, as well as which data is printed.   See **Printout options**.

Subjects

You can print not only the current class, but data from other classes as well--on the same printouts!   See **Subjects**.

See also

> **Analyzing grades**
> **Individual data entry**
> **Plots**
> **Printing basics**
> **Seating charts**
> **Section data entry**

Plots

There are four major types of plots in VGW.   These allow a wide range of ways of analyzing grades.

Histograms

Histograms are graphs where the x-axis plots the range of scores and the y-axis show the number of students within each range.   This is the most common type of graph.   Besides histograms, VGW also plots pie charts.   These are included in the histogram part of the program.   Besides plotting the data, statistical measures such as mean and median are also shown on the graphs.   See **Histograms** for more detail.

Correlations

Correlation plots are where scores on two tasks are plotted against each other on the same graph. Correlations tell you how similar the scores are on the two tasks.   These are included because they are a tremendous learning tool.   You can tell from correlations whether a particular task was testing similar or different skills than another task.   For more information, see **Correlations**.

Individual plots

If you want to know how a particular student is progressing, individual plots can give you this information. These plots show the scores for a particular student on a series of tasks.   VGW can plot not only the raw scores, but can also plot various statistical measures of a student's progress.   See **Individual plots** for more information.

Class plots

Class plots plot a single task.   However, it plots the range, mean, median, and standard deviation on a single line graph.   In addition, it can plot the score of a single student on the graph.   You can use these plots to get a feel for how the class did on a particular task as well as a graphical way of showing a student how they compare to the rest of the class.   See **Class plots** for more information.

See also

Analyzing grades
Plot options

Ignoring students

Students can be permanently ignored.   This means that you can enter data for the students, but they will not be used for plotting or statistical calculations.   The most common use of this is to eliminate students who are doing exceptionally poorly in a class.   Another use is to eliminate students who enter classes late in the semester.

Ignoring students

To ignore students, you need to be on a plot or statistics window.

- Select "Select".
- Select "Ignore".
- Next, select the students you want to ignore, and reject those you wish to use for plots and statistics. These students will be ignored until you change them back to normal.

See also

Selecting ranges
Selecting students

Selecting ranges

When a plot is first selected, the full range of scores is plotted.   In some cases, you would prefer to plot a restricted range of scores to eliminate high or low students.   In other cases, you might want to have the numbers on the axes have regular values.

To acheive either of these objectives:

- Select "Select".
- Select "Range".
- You are shown the current high and low ranges.   Enter new ones you desire.   A blank value means that VGW should use the appropriate value (highest or lowest).

See also

> **Ignoring students**
> **Plots**
> **Selecting students**

Entering data

You can enter student names, IDs, database items, tasks (assignments), attendance, and seating charts. There are two major data entry screens for all data except seating charts: by individual and by section or class. In addition, there are other places in the program where data can be entered.

Section or class data entry

When the program first starts, the section data entry screen is opened. This is a spreadsheet style screen, with several buttons along the top. Each cell has one piece of data. Students can be added, deleted, or have their data changed from this screen. See **Section data entry**.

Individual data entry

The other major place to enter data is the individual data entry screen. To reach this screen:

- Select "F8" when on the section data entry screen,

or

- Select "Edit" from the Main Menu.
- Select "by Individual" from the Edit Menu. The same data can be entered from this screen as from the section screen. However, only one student is listed on this screen. See **Individual data entry**.

Data entry considerations

Each cell holds a particular type of data. For example, a task may accept numbers as input. The cells will not allow unacceptable data input. If numbers are expected, no letters can be entered into the cell. VGW will ignore unallowed characters.

In the case of number tasks, the highest allowed points are also checked. A number higher than the total points of a task are not allowed *unless* an option on the "Edit Options" screen is checked ("Verify scores when entered").

The right mouse button can be used for quickly viewing data. If the button is pressed, a menu pops up. Selecting one of the options will let you view data or plots. The current student and/or column are used to decide which data to view.

Any time you are entering data, you can cut, paste, copy, or undo the data. Use the standard Windows keys $<CtrlX>$ to cut, $<CtrlC>$ to copy, $<CtrlV>$ to paste, and $<CtrlZ>$ to undo the data.

When entering decimal numbers, you can also enter mathematical functions (*, /, +, -, and =). You can therefore add up scores on test questions or make adjustments without having to resort to a calculator or back of an envelope. This is called an "inline" calculator. *Example*: To add up 1, 2, and 3 in a cell for a number task, type "$1+2+3=$". "6" will appear in the cell.

See also

Edit options
Importing data
Seating charts

Individual data entry

Adding or removing students

- To add a student, select the "Insert" menu choice.   You can then enter the new student name and data.
- To remove a student, select the "Delete" menu choice.

Locating students or data

- Select "Edit".
- Select "Find student".
- You can then select from a list of students.   After you select a student, the screen changes to that student.

You can also locate a particular value by moving to the desired data, then:

- Select "Edit".
- Select "Locate value".
- The first student that matches the value will be shown on the screen.

Moving between students

You can move between students with the keyboard:

- <AltN> will move to the next student.
- <AltP> will move to the previous student.
- <AltB> will move to the beginning student.
- <AltL> will move to the last student in the class.
- In addition, clicking with the mouse on the <Left> (←) or <Right> (→) arrows on the menu will move to the previous or next student, respectively.

Changing what data to list

One feature that distinguishes VGW is the ability to change not only which columns are listed on the screen but also the order in which they are listed.

- Select "View".
- You can select whether to view names, IDs, and sections.   These items are checked when they will be listed.   In addition, you can select which tasks, database items, or attendance dates will be shown.   For these last three, you are presented with another screen so that you can select those items and their order.

Printing data

- Select "File".
- Select "Print" on the File Menu.   For a more sophisticated printing of data, select "Write" on the Main Menu, then "Name".
- To copy data to the Windows clipboard or to a file, select "Copy" on the File Menu, then "to Clipboard" or "to File".

Recalc

Recalculations are normally done after each task score is entered.   If this slows the program too much, you can turn it off:

- Select "Edit Options".
- Select "Automatically recalculate grades".
- You then can manually recalculate the current student by selecting "Recalc".

Note: If the recalc option is off, each time you move to a new student the data is then recalculated.

See also

Entering data
Section data entry

Section data entry

Listing Students

If there is one section of students in the class, all students will be listed.   Otherwise, you can select which sections of students to use by clicking on the "Section" button.   You will be shown a list of students and their sections.   Select at least one student from each section you want to view.   If you have a very large class, entering data for one section of students at a time can sometimes be much faster.

Adding or removing students

Students are in rows.   To add a student, there are two buttons.   The "Add row" button adds a new row at the *end* of the list of students.   The "Ins row" button adds a new row where the cursor is located.   You can then enter the new student name and data.

To remove a student, move the cursor to the row of that student.   Next, click the "Del row" button.

In one case, these three buttons will be grayed.   This happens when you select "Prevent alteration of student names" on the "Edit Options" dialog.   In addition, if this option is selected, there are no additional blank rows at the bottom of the list of students.   You can also prevent alteration of student IDs and sections.

Locating students or data

To locate a student in a large class, you can select the "Find row" button.   You can then select from a list of students.   Note that both the screen and the list of students shown use the same list of sections to view.   After you select a student, the cursor moves to that student.

To locate a value, move to the desired column.   Select the "Locate" button.   You can then enter the desired value or part of a value.   By clicking on the "Next", "Previous", or "From top" buttons, you can locate the desired value.

Filling in data

In some cases, you may have almost all students receiving the same value on a piece of data.   If you select the "Fill col" button, all unentered values (blank) in the current column can be filled with the same value.

Changing what data to list (columns)

One feature that distinguishes VGW is the ability to change not only which columns are listed on the screen but also the order in which they are listed.   To do this, select "View".   You can select whether to view names, IDs, and sections.   These items are checked when they will be listed.   In addition, you can select which tasks, database items, or attendance dates will be shown.   For these last three, you can select the order of the items, as well.

You can also specify whether to show as much data on the screen as possible.   The "Task min width" and "Attendance min width" options will allow just enough room on the screen to enter the data, but not necessarily enough to view the entire name of the item.

You can select the fonts for data entry with the "Font" option.   This font is used for viewing the data and for printing it.

Printing data

The "Print" button will print the current list of students and data.   For a more sophisticated printing of data, select "Write" on the Main Menu, then "by Section".

See also

    Entering data
    Individual data entry

Seating charts

Up to two seating charts can be kept for each section of students in your class.   This allows a normal seating chart and a special one, for example, for labs.

Defining seating charts

- Select "Attendance".
- Select "Seating charts".
- Select "View".   Seating chart 1 is shown.   If no chart was previously defined, VGW makes one, including placing students on the chart.
- To define chart 2, select "Chart"
- Select "2nd chart".

To do a seating chart for a different section of students:

- Select "Select"
- Select "Section".

The next thing you need to do is to move the students into the correct seats.   You do this by dragging the desks around.   Dragging is done by moving the mouse pointer to the desired desk, pressing and holding down the left mouse button, and then moving the desk to the new location.   You then release the button. While the desk is moving, the color changes.

Changing the chart

You can let the program select seats for you:

- Select "Select".
- Select "Alphabetize" or   "Reverse alphabet" or "Randomize".   The desks will stay in the same positions, but the students move around.   You can also drag the desks around to their new positions.

You can change the appearance of the screen, as well:

- Select "View".
- You can change how the name appears in the desks.

- Three options on "Select" also change the appearance: "Chart labels", "Lines on chart", and "Shadows on chart".   For shadows to appear, lines must also be selected.   Chart labels changes the title and instructors title for that chart.   "Output terms" changes the instructor title for all parts of the program.

Printing charts

- Select the desired chart.
- Select "Chart".
- Select "Print chart".

Removing charts

- Select "Attendance" from the Main Meu.
- Select "Seating charts".
- Select "Remove chart 1" or "Remove chart 2".

See also

<u>Attendance</u>
<u>Seating chart attendance</u>

Exporting data

Data from VGW can be exported to other programs.   There are two basic formats supported by the program: **flat files** and **comma and quote files**.   In addition, you can export data directly to another VGW class.   Spreadsheet and database programs usually can read both flat files and comma and quote files.

Comma and quote files

Comma and quote files are ones where the data is separated by commas.   If the data has a comma in it, double quotes are used to keep the data together.   For example, one line might read:

     "Mendel, Gregor", 100, 50, B+, "Peas are great!"

This example would have five pieces of data, including what appears to be a name, two number grades, one letter grade, and one database field.   To export data in this format:

- Select "File".
- Select "Export".
- Select "Comma and Quote".
- You then select the task scores to export, whether to export names and/or IDs, and the order that the data needs to be in.   Last, you need to select the name of a file.   This file will contain the exported data.

Flat files

Flat files have data in columns.   The columns are separated by spaces or tabs.   For example:

    Mendel, Gregor <tab> 100 <tab> 50 <tab> B+ <tab> Peas are great!
    Mendel, Gregor   100   50   B+   Peas are great!

This example would have five pieces of data, including what appears to be a name, two number grades, one letter grade, and one database field.   In this example, the data on the first line is separated by tabs, while the second line is separated by spaces.

Exporting to flat files is like exporting to comma and quote files with two differences:

- First, select "Flat files" as the type instead of "Comma and quote".
- Second, you need to specify whether to separate columns of data with spaces or tabs.   If in doubt, try tabs first, as they are more likely to keep the data in the correct columns.

Exporting directly to another VGW class

Exporting to another VGW will export whichever tasks you want, while keeping the identical task definitions.   When data is exported via comma and quote or flat files, the task definitions are not exported.   This method exports the definition, as well.   This means that sum, average, weight, etc. tasks stay the same task type.

- Select "File".
- Select "Export".
- Select "Directly to another class".

See also

    Importing data
    Manipulating tasks

Attendance types and values

Attendance types

There are 13 types of attendance.   Although VGW gives them names, you can rename any or all of them. The default names are: present, present 2, late, late 2, excused, excused 2, unexcused, unexcused 2, other, other 2, activity 1, activity 2, and not entered.   They also have two character values for entering data.   In addition, when new dates are defined, the student values default to one attendance type. Since most students are usually in class, the default is present.

All three items can be changed.   You can rename any of the attendance types, change the two character codes for the types, and change the default attendance.   To do this, select the "Attendance", then "Options" main menu choice.

See also

Attendance
Attendance total tasks
Date options
Options

Attendance task values

There are three types of tasks that use attendance.   These tasks convert the attendance to numbers that can be used in determining student grades.   The values used by two of them, attendance tasks and attendance extra credit tasks, can be changed on the "Attendance", then "Values" screen.

Each of the 13 attendance types can have a value.   The values can be any number.   In addition, you can specify how many days to discard.   The days discarded will be those that have the lowest attendance values.

See also

Attendance extra credit tasks
Attendance tasks

Defining attendance days

Using a calendar

This method is used to define a lot of days at once.

- Select "Attendance".
- Select "Define dates".
- Next, you select the days of the week that the class is held.

Two calendars are then used for selecting the beginning and ending dates for the class.   The left calendar is used to select the first date of the class, and the right calendar is used to select the last date of the class.   Pressing the left or right arrow buttons on the calendars moves the months forward or backwards one month.   Clicking on the scroll bars move the calendar one year forwards or backwards.

All dates between and including the first and last dates on the days of the week you selected are then defined as attendance days.

Note: The date names are made using the date format specified on the "Options Date Format" section of the program.   The date names are specified on the "Options Date Names" section of the program.   Both the names and date format default to the Windows specified values, but can be modified by you.

Defining single days

- Select "Attendance".
- Select "Insert one date".
- You are asked for the number of the new date, and then a calendar is used to select the name of the date.   The name is shown on the box in the middle of the screen.   You can either type in the name or select a date with the left mouse button.

See also

Attendance
Attendance types and values
Date options

Options

VAR Grade for Windows (VGW) can be customized.   Most of the customizations affect how data is treated or printed.

Click on the following for more information:

      Attendance types and values
      Date options
      Edit options
      File options
      Importing data
      Names and IDs
      Passwords
      Plot options
      Printout options
      Sections
      Sorting
      Task options
      VAR Grade version

Date options

Date formats

By default, dates are formatted according to how Windows specifies the date format.   To change the dates:

- Select "Option".
- Select "Date format".

There are numerous versions of how to format dates.   You can include various type of numbers, month names, and days of the week.   If you use a language other than English, you may wish to change the date names before you change the date format, as it will give a better idea of how the formatting will look.

One option is to specify your own format.   This allows customization.   For example, you could define a format that would result in dates like: 4 of July, 1994, *or* Month 7 Day 4 Year 1994, *or* almost any other format.

Date names

You can change the names of the months and days of the week.   For several languages, there is automatic support for the languages.   For others, you have to do your own translations.

- Select "Option".
- Select "Date names".
- The changes take effect immediately.   However, any attendance days already defined will retain the old date names.

See also

Attendance
Attendance types
Options

Seating chart attendance

Attendance can be entered from a facimile of a seating chart.   When on the seating chart, select "Attendance".   Then select a date for entering data.   The screen then shows the students in their seats, but now has boxes for entering attendance.

You can switch between charts 1 and 2, change the way names are written on the desks, and select or even define new dates from this screen.

See also

<u>Attendance</u>
<u>Seating charts</u>

International support

VAR Grade for Windows (VGW) can be customized for different languages and ways of doing things.

Click on the following for more information:

Date options
Output terms

Statistics

There are a wide number of statistical tests that can be done on students in your classes.   In addition, you can assign the statistical values to students, enabling grading by statistical measures such as percentiles and t-scores.

Descriptive statistics

Descriptive statistics calculates and displays a variety of statistical measures of a class.   It shows a histogram of the class, as well.

- Select "Grade".
- Select "Descriptive statistics".
- You then select a task.
- The display shows the high and low scores, the number of students, the mean, median, standard deviation, and mode (and the number of students at the mode), and a histogram showing the scores and how many students were in each category.   The numbers are analogous to those in the histograms, but the presentation of the results is quite different.

- You can select a new task to show statistics by selecting "Task".
- You can also change the sections that are described by selecting "Sections".
- You can print the results by selecting "File", then "Print".

Assigning statistics values

You can not only calculate statistics, you can also assign those values to a task.

- Select "Grade".
- Select "Assign statistics values".
- Next, you choose one of four options:

  - Student t-scores: These are used to test the significance of small samples.   It compares the sample mean with the standard deviation, and assumes an approximately normal distribution. Approximately 95% of the values should be from +2.0 to -2.0 if the sample size is 20.
  - T scores (scaled Z scores): The z scores (see below), are scaled by multiplying the z score by 10, and adding 50.   This will give a mean of 50.
  - Percentiles: The students are ranked by score, and the percentile calculated from that.   A 50%ile means that the score was higher than 50% of the other scores.   A 99% is the highest, and 0% is the lowest.
  - Z scores (standard deviations): These are calculated by the deviation from the mean. Approximately two-thirds of the scores are from +1 to -1, and 95% of the scores range from +2 to -2.   These calculations assume a normal (bell-shaped) distribution, and reasonably large sample sizes.

- You then select the task for the calculations, and another task to assign scores.   The second task will end as a number task.

Note: Assigning statistics values is a one-time thing.   They are not continually recalculated.   If you change grades of students after calculating the values, you should recalculate them and reassign them to the same task.

Adjusting statistics values

Adjusting statistics values can let you compare and adjust two different tasks, sections, or classes.   The same test may have been given under different circumstances, or similar but different test given.

Adjusting the scores so that the students have the same statistical profiles can sometimes be necessary.

To adjust statistics, the task must be a number, letter, or extra credit task (the others are calculated tasks).

- Select "Grade".
- Select "Adjust statistics values".
- After picking the task, you are shown a screen that shows the current mean, median, and standard deviation, whether there were any previous adjustments, and cells for changing the mean and standard deviation.   Changing these values will alter the student scores.   If you remove the adjustments, the scores will return to the original values (except for possible rounding errors).

See also

Correlations
Plots
Scaling grades

What ifs

What ifs are used to calculate the grades needed on the remaining assignments to obtain various grades. Because you are calculating a students final grade, what ifs can only be done with final tasks.

To do what ifs

- Select "Grade".
- Select "What ifs".
- You then select the final task to use for the calculations.
- Next, you select the student(s) to use.
- If the cutoffs for the final task haven't been assigned, you are then asked to enter them.

The what if window shows the student(s), their current points, how many points left they have, and the scores needed for each grade.   If the grade has been acheived or is impossible to obtain, comments saying this are shown, otherwise the scores and percentage needed for the other grades are shown.

Changing the what ifs

- You can change the cutoffs needed for each grade by selecting "Cutoffs".
- You can change the task used for the what ifs by selecting "Task".
- After viewing the current student(s), you can view more by selecting "Students".
- The appearance of the data can be changed by selecting "View" (to change the way names and IDs are shown), or by selecting "Output terms" (to change the wording of messages.

- You can print the what ifs by selecting "File", then "Print".
- You can copy the what ifs to the Windows clipboard or to a file by selecting "File", then "Copy", then "to Clipboard" or "to File".

What does the data mean?

- Current points: the number of points the student has currently completed.   There are some cautions, however.   If there are weight tasks,   for example, the points shown are the weighted points.
- Current total: the total number of points the student has currently attempted.
- Points left: the maximum possible points minus the current total.   Again, tasks like weight tasks throw off the meaning of this number.
- Maximum points: how many points the student would have if every assignment were completed and done perfectly.
- Min. score for grade: the grade cutoffs.   You can change these by selecting "Cutoffs".
- Needed scores: the scores needed on the remaining assignments to obtain that grade.   Note that these are the points needed to guarantee the grade.   It is possible, in some complicated situations, for a student to obtain that grade by getting lower scores.   In these cases, VGW estimates the minimum grade by plugging in various numbers and finding the lowest that work.   The true minimum needed can be 1% lower in some circumstances.   If the grade has already been earned or is impossible to obtain, these are noted with messages, not numbers.
- Pct. needed: if a score appears in the needed scores column, the percent needed is also calculated.

Note: In most cases, an exact solution is calculated.   In those cases where exact solutions aren't easily calculated, the needed scores are estimated, and are not necessarily the minimum needed.

See also

Analyzing grades
Final tasks

Assigning grades

Final tasks inherit the grade cutoffs when they are defined.   If you decide to change the cutoffs, you will to reassign grades.

- Select "Grade".
- Select "Assign final grades".
- You must first select a task.   If you select a final task, the new cutoffs will take precedence over the previous ones.   If you select any other task, the grades will only be temporarily assigned, but no permanent record is made of them.
- Next, you are asked for the cutoffs.   These are the minimum scores necessary to obtain that grade. If a cell is left blank, no students will receive that grade.   If a cell has a value higher than a previous one, again, no student will receive that grade.

After assigning cutoffs, the grades are assigned and shown in a window.   In addition, the cutoffs and numbers of students per grade are shown at the end of the list.

Changing the window

- You can change the cutoffs by selecting "Cutoffs".
- Some of the write options can also be changed by selecting "File", then "Options".
- Changes to the appearance of the window can be made by selecting "Output terms" and "View".
- To print the data, select "File", then "Print".
- To copy the data to a clipboard or write it to a file, select "File", then "Copy", then "to Clipboard" or "to File".

See also

Analyzing grades
Final tasks
Write options

Adjusting grades

After grades are assigned, you may wish to alter a student's grade due to extenuating circumstances. For example, the student may have been sick, yet took the final exam anyway. You can adjust the grades to take into account these sorts of problems.

To adjust grades:

- Select "Grade"
- Select "Adjust final grades".
- You are then asked to select a final task. *Only final tasks can be adjusted.*
- You are then shown a screen, with names and/or IDs and/or sections, and two new tasks, both starting with "Adjusted": the final task you selected and the task used for assigning final grades. The screen works exactly like the class data entry screen, except that you cannot add or delete students or change which tasks are listed. You can now change any grades you wish.
- When you are finished, you will notice that these two tasks have been added to your class. These are now the "final" final grades.

See also

Analyzing grades
Section data entry
Final tasks

Scaling grades

Scaling grades means to add, subtract, multiply, or divide those grades.   The main purpose of this is to adjust grades to make two tasks, sections, or classes comparable.   For example, if you have three sections of a class, and each receives different quizzes, you may have to adjust the sections to equalize the difficulty of the quizzes.

- Select "Grade".
- Select "Scale a task".   *Only number and extra credit tasks can be scaled.*
- You then select a task to scale.
- Next, you select whether to multiply, divide, add, or subtract a value from the scores.   The value is also needed on this screen.
- The students scores are then scaled.

Note: Only students in the current sections are scaled.   Therefore, if you have more than one section of students in the class and want to scale scores in only one section, select that section first, then scale the grades.

See also

> **Adjusting grades**
> **Adjusting statistics values**

Histograms

Histograms are graphs where the x-axis plots the range of scores and the y-axis show the number of students within each range.   This is the most common type of graph.   Besides histograms, VGW also plots pie charts.

Plotting a histogram

- Select "Plot".
- Select "Histogram".
- Next, you select the task to plot.   The histogram is then shown in a window.   There are a number of changes you can make to the histogram, as described below.

Selecting students

Initially, all the students are plotted.

- Select "Select".
- Select "Students".
- There are four ways to select students: no students, all students, pick the students, and students who match values.   The last two options allow you to select which students you want.   If you pick the students, you can select whichever students you want.   Matching students selects students who are above, below, equal, or between values .   The values can be names, IDs, tasks, or database items. See **selecting students** for more information.
- You can also select students to ignore.   After selecting them, the students will be ignored for all statistics and plots until they are no longer ignored.   See **Ignoring students** for further details.

Selecting a new range

Alternatively, you can select a different range of scores to plot.   The initial plot selects all the students by plotting a range of the lowest score to the highest score.   There are two major reasons to change these values.   First, the plot may include students who are significantly higher or lower than the competition. By selecting a restricted range of values, you can eliminate these "outliers".   Second, by selecting a new high and low, you can make the x-axis have more understandable values.   For example, you can plot from 50 to 100 instead of 52.5 to 98.5.   The first range of values makes it easier to determine the ranges for each of the students.   See **selecting ranges** for more details.

Changing the type of plot

The initial plot is a 3D bar chart.   However, there are five other types of plots: 2D bar, 3D and 2D pie charts, tape chart, and line chart.   These plot the same data in different ways.

One potential problem with pie charts is that, if there are too many categories of students, the chart looks busy or crowded.   Pie charts look best when only a few categories exist.

To change the chart type, select "Chart", then one of the first six chart types.

Printing the plot and data

- Select "Chart".
- Select "Print chart".
- You can also change the font for the chart.   There are five different font types that can be selected.

The data for the chart can also be printed:

- Select "Chart".
- Select "Print data".
- All the *data* for the current chart is printed.   You can select the font for the data, as well: any Windows font can be used.   In addition, you can copy the *data* to the Windows clipboard or to a file from the Chart Menu.

You can also copy the chart to the Windows clipboard:

- Select "Chart".
- Select "Copy".

Chart appearance

You can change some of the cosmetic or wording on the charts, as well.

- To change the labels, select "Select".
- Select "Chart labels".
- You can change the chart title, the x-axis title, and the y-axis title.   You can also change some Output terms.   These are primarily used when printing the data for the chart.

You can change whether there are vertical lines on the chart:

- Select "Select".
- Select "Lines on chart".
- You can also select whether to show the statistics on the chart.   These are the mean, median, and standard deviation arrows.   Again, you select this with "Select", then "Show statistics".

See also

Class plots
Correlations
Individual plots
Plots

Correlations

Correlations tell you how related two tasks are. A number close to 1 means that the scores on the two tasks were very similar to each other, a number close to 0 means that the scores on the two tasks were unrelated to each other, and a number close to -1 means that students who did well on one task did poorly on the other one, and vice versa. You should expect that, if you correlate any two tasks, the values should be significantly above 0, but not as high as +1. Values from 0.4 to 0.8 aren't unusual. If values are near 0, or even below 0, some investigation of the two tasks is warranted to see why students did so differently on the two tasks.

Correlating two tasks

- Select "Plot".
- Select "Correlate two tasks".
- Next, you are asked for the x-axis task and then the y-axis task. You are then shown the plot.

Selecting students

Initially, all the students are plotted. You can change which students to use by using the following method:

- Select "Select".
- Select "Students".
- There are four ways to select students: no students, all students, pick the students, and students who match values. The last two options allow you to select which students you want. If you pick the students, you can select whichever students you want. Matching students selects students who are above, below, equal, or between values . The values can be names, IDs, tasks, or database items.

You can also select students to ignore. After selecting them, the students will be ignored for all statistics and plots until they are no longer ignored. See **Ignoring students** for further details.

Selecting new ranges

Alternatively, you can select different ranges of scores to plot. The initial plot selects all the students by plotting a range of the lowest score to the highest score for each of the tasks. There are two major reasons to change these values. First, the plot may include students who are significantly higher or lower than the competition. By selecting a restricted range of values, you can eliminate these "outliers". Second, by selecting new highs and lows, you can make the axes have more understandable values. For example, you can plot from 50 to 100 instead of 52.5 to 98.5. The first range of values makes it easier to determine the ranges for each of the students. See **selecting ranges** for more details.

Printing the plot and data

- Select "Chart".
- Select "Print chart".
- You can also change the font for the chart. There are five different font types that can be selected.

The data for the chart can also be printed:

- Select "Chart".
- Select "Print data".
- All the data for the current chart is printed. You can select the font for the data, as well, and any Windows font can be used.

You can also copy the chart to the Windows clipboard:

- Select "Chart".
- Select "Copy Chart".

You can also copy the data for the chart to the Windows clipboard or to a file:

- Select "Chart".
- Select "Copy".
- Select "to Clipboard" or "to File".   If you selected "to File", you then enter the name of the file.

Chart appearance

You can change some of the cosmetic or wording on the charts, as well.

- Select "Select".
- Select "Chart labels".
- You can change the chart title, the x-axis title, and the y-axis title.

You can also change some Output terms.   These are primarily used when printing the data for the chart.

You can change whether there are horizontal and vertical lines on the chart:

- Select "Select".
- Select "Lines on chart".

You can also select whether to show the statistics on the chart.   This is the correlation line:

- Select "Select".
- Select "Show statistics".

See also

Plots
Statistics

Individual plots

Individual plots are used to show the progress of a student.   These plots show the scores of an individual for any tasks you select.   The student scores can also be converted to statistical values and plotted.

Plotting scores for an individual

- Select "Plot".
- Select "Individual progress".
- Next, you select the student to plot.
- Last, you select the tasks to plot.   There are a number of changes you can make to the chart, as described below.

Selecting different tasks

To plot different tasks, select "Tasks".   Any tasks can be plotted in any order.

Selecting a different student

- Select "Select".
- Select "Student".
- Select the student you want to view.

Changing the type of chart

The initial plot uses the total points.   There are several other ways the data can be plotted: percentages, **percentiles**, **standard deviations** (z-scores), **T scores**, and **student t scores**.

To change the data type, select "Select", then one of the six data types.

The initial plot uses 3D bars.   2D bars, line, and tape charts can also be plotted.   To change the chart type, select "Chart", then one of the four types.

Printing the plot and data

- Select "Chart".
- Select "Print chart".   You can also change the font for the chart.   There are five different font types that can be selected.

The data for the chart can also be printed:

- Select "Chart".
- Select "Print data".
- All the data for the current chart is printed.   You can select the font for the data, as well, and any Windows font can be used.

You can also copy the chart to the Windows clipboard:

- Select "Chart".
- Select "Copy chart".

You can also copy the *data* for the chart to the Windows clipboard or to a file:

- Select "Chart".
- Select "Copy".

- Select "to Clipboard" or "to File".   If you select "to File", you then enter the file name.

Chart appearance

You can change some of the cosmetic or wording on the charts, as well.

To change the labels:

- Select "Select".
- Select "Chart labels".
- You can change the chart title, the x-axis title, and the y-axis title.
- You can also change some Output terms.   These are primarily used when printing the data for the chart.   Select "Output terms" from the menu.

You can change whether there are vertical lines on the chart:

- To change this, select "Select".
- Select "Lines on chart".

You can also select whether to show the statistics on the chart.   These are the trend lines that show the direction the scores are going:

- Select "Select".
- Select "Show statistics".

See also

Class plots
Plots
Statistics

Class plots

Class plots show the major statistical parameters of a task, and can also show where a student fits onto that plot.

Plotting class statistics

- Select "Plot".
- Select "Class vs Individual".
- Next, you select the task to plot.
- Last, you select the student to plot.   If you don't select a student, the class data will be plotted, but not the student.   There are a number of changes you can make to the chart, as described below.

Selecting a different task

- Select "Tasks".

Selecting a different student

- Select which student to use by selecting "Select".
- Then select "View Student".

Selecting different students in the class

Initially, all the students are plotted.   The following explains how to change this.

- Select "Select".
- Select "Students".
- There are four ways to select students: no students, all students, pick the students, and students who match values.   The last two options allow you to select which students you want.   If you pick the students, you can select whichever students you want.   Matching students selects students who are above, below, equal, or between values .   The values can be names, IDs, tasks, or database items. See **selecting students** for more information.
- You can also select students to ignore.   After selecting them, the students will be ignored for all statistics and plots until they are no longer ignored.   See **Ignoring students** for further details.

Printing the plot and data

- Select "Chart".
- Select "Print chart".
- You can also change the font for the chart.   There are five different font types that can be selected.

The data for the chart can also be printed:

- Select "Chart".
- Select "Print data".
- All the data for the current chart is printed.   You can select the font for the data, as well, and any Windows font can be used.

You can also copy the chart to the Windows clipboard:

- Select "Chart".
- Select "Copy Chart".

You can also copy the data for the chart to the Windows clipboard or to a file:

- Select "Chart".
- Select "Copy".
- Select "to Clipboard" or "to File".   If you choose "to File", you enter a name for the file.

Chart appearance

You can change some of the cosmetic or wording on the charts, as well.

To change the labels:

- Select "Select".
- Select "Chart labels".
- You can change the chart title and the x-axis title.   You can also change some Output terms.   These are primarily used when printing the data for the chart.

You can change whether there are range lines on the chart:

- Select "Select".
- Select "Range on chart".

You can also select whether to show the statistics on the chart.   These are the mean, median, and standard deviation arrows:

- Select   "Select".
- Select "Show statistics".

See also

<u>Plots</u>

Sections

Sections are groups of students.   A typical large university class will be divided into sections of students.   A high school teacher may teach three classes that are identical except for the students: these can be treated as sections.   Typically, each section in a class has the same assignments, but they meet at different times and/or places.

The advantage to using sections is that you can select just one section for printing, plotting, or other manipulations, or any combination of sections.

Multiple sections

VGW normally assumes that there is only one group of students in the class, hence one section.   Therefore, the multiple sections option on the Main Menu "Option" is turned off.   If you select the option, it will become checked.   This option controls whether a new class will automatically support more than one section of students.

Defining sections

When the program loads a class, there is only one section.   If you want to add students to a new section, you can select one of the "Edit", "Quick entry of students..." options.   If multiple sections is set, then you are asked for the section for adding students.   If you enter a new section number, a new section is defined.

Alternatively, if you already have more than one section of students in the class, you can change the section number of the student in the section column or cell.   When the student is saved, if the section number is new, the section is defined.

Selecting sections for viewing and analysis

Any menu or button that has "Sections" on it can be used to change the sections that are viewed, plotted, or listed.   If there is only one section of students, or you turn off using multiple sections of students, or you used a section password, the button or choice is grayed, and no sections can be selected.

To choose new sections to use, after selecting the section menu choice or button, a list of the students in the class and their sections appears on a screen.   Click on one student in each section that you want to use, then "OK" when finished.

Section names

The default section name is "Section #", where # is the number of the section.   You can specify a name for each section of the class.   That name will be printed on reports instead of the generic one.

- Select "Write".
- Select "Section names or comments".
- You could then specify names like "MWF 9-10", or "Room 101", or whatever else you want.

Removing sections

- Select "Edit".
- Select "Remove section".
- You are asked for a section.   Click on any student from the section that you want to remove, then click on the "Select" button, and then "OK".

Changing sections

- Select "Edit".
- Select "Move section".
- You are asked for a section.   Click on any student from the section that you want to move, then click on the "Select" button, and then "OK".
- Next, you are asked for the new section.   Either select a student from the new section, or type in a new number.

Removing all students

- Select "Edit".
- Select "Empty the class".

See also

Entering students
Options

Sorting

Students can be ordered a wide variety of ways: sorted by names, ids, sections, task scores, or database items, randomized, not sorted, or sorted by combinations of sections and the other items.   If you sort by task or database item, you can select any task or item.

- Select "Option".
- Select "Sort order".
- Next, a screen listing the various options is shown.   If you have more than one section of students in the class, there are twice as many options since you can double sort on section and any other item.
- If you select to sort by task or database item, you must also select the item.

See also

<u>Options</u>

Edit options

VGW allows you to alter many of the ways that it works.   When entering data, the following options can affect how things work, and can be changed on the Edit Options screen ("Edit", then "Options"):

Verifying scores

Normally, VGW checks task scores when they are entered.   If the entered score is greater than the points allowed for the task, the score is rejected and a warning beep sounds.   In some cases, you would like to be able to enter scores above the points allowed.   To do this, remove the check on "Verify scores when entered" by clicking on it.   If you don't want the beeps to sound when the scores are verified, remove the check on "Make sound on data input errors".

Altering names, IDs, and sections

You can normally edit the names, IDs, and sections.   After all your students have been entered in the class, you may wish to prevent accidental changes in these values.   To do this, you check the appropriate "Prevent alteration of ..." option by clicking on it.   If the option is checked, that cell type is grayed when data is being entered, and the cursor cannot enter those cells.   In addition, when entering data by section or class, you will not be able to add, delete, or insert rows (students) when names are prevented from alterations.

Recalculating grades

Grades are normally automatically recalculated every time you change a task score.   This can, in some cases, slow down movement between cells.   You can make recalculations occur only when the screen is exited or changed by unchecking the "Automatically recalculate grades" option.   When entering data by individual, the recalculations then occur when a new student appears.   When entering data by section or individual, the recalculations would then occur when the screen is exited or when other parts of the program, such as plotting, are executed.

Width of cells

The width of cells on the Class data entry screen is normally wide enough to see all the entry and data name at once.   However, you can get more cells on the screen if you see only part of the name.   If you check the "Use minimum width to enter ..." options, the cell is only wide enough to enter data.

How the <enter> key works

The <enter> key can move the cursor to the right, down, or nowhere on the data entry screens.   The direction is selected by clicking on the desired movement on the "<Enter> moves" option.   If you usually enter several scores for one student, it is faster if the <enter> key moves to the right.   If you enter scores for all students for one data type at once, it is faster if the <enter> key moves down.   Many spreadsheets, however, have the <enter> key do nothing (no movement).

Decimals

You can select how many decimal places the data have when displayed.   There are tasks for data input (regular) and calculated (special) tasks.   The calculated tasks usually need at least one decimal place to be displayed.   You can display a maximum of five decimal places.

Colors

VGW has it's own set of colors for data entry.   If you do not like those colors, you can select the "system" colors.   These are the standard Windows colors.   Windows colors can be changed from the Control

Panel in the Main program group.

Individual data entry
Options
Section data entry

File options

To prevent data loss, VGW normally writes its classes with the read-only file attribute set.   This prevents MS-DOS from deleting the class files.   VGW, however, can alter and delete the files.   See **Class files** for moving, removing, copying, or recovering class files.

File attributes

File attributes tell DOS how to treat a file.   Read-only files, for example, can be read but not changed. However, they can sometimes be a problem.   Some backup programs, for example, don't handle them very well.   You can change the file attribute of class files:

- Select   "Option".
- Select "File protection".
- Click on the desired option.   The default is read-only.   Normal files are the most likely change, while hidden and hidden/read-only give greater protection to your classes by preventing MS-DOS from even listing the files (they are still listed in VGW).

Backup files

Every time a class is saved, the previous version of the class is also saved.   This is called a backup file. The class files end with the extensions ".PAR" and ".DAT".   The backups end with ".PAX" and ".DAX". This takes up space on your disk, but, if anything goes wrong with the current class, you can at least recover the recent data.   The backup files can be recovered, see **Class files**.

If you don't need the backups, or if they take too much disk space, you can prevent VGW from making the backup files:

- Select   "Option".
- Select "File protection".
- Click on   "Make backups when saving data" (you want it *unchecked*).

See also

Exiting the class
Options

Names and IDs

Names and IDs can have up to 30 characters.   In addition, when IDs are printed, if desired, only the rightmost characters of the ID can be printed.   This helps remove distinguishing characteristics of some IDs, such as the year that the student entered the school.

To change the size of the names, IDs, or rightmost digits to print, from the Main Menu:

- Select "Option".
- Select "ID and name sizes".

See also

Entering students
Options

Passwords

Passwords are used to prevent unauthorized users from looking at the student data.   In VGW, you can protect the whole class, but can also have passwords for each section of students.   If the section password is entered, only that section is available for viewing.   If the main password is entered, all sections are available for viewing.   Note that passwords protect only that particular class.

Section passwords are good for large classes.   Assistants can have a password for their section, while the instructor uses the main password.

Defining passwords

- Select "Option".
- Select "Password".
- Select You can enter a password of up to 15 characters.
- If you have more than one section of students, and you also wish to enter passwords for sections, click the "Sections" button.   If no password is entered for a section, that section can only be viewed with the main password.   You must have a main password to be able to define the section passwords.

Note: Passwords are not 100% secure.   They just reduce the chance of snooping.

See also

Sections

Plot options

You can tell VGW whether to default the plots to the all the scores (full range), or the cutoffs you most recently assigned.   If you select the cutoffs, and no cutoffs have been defined, the program plots all the scores.

See also

Plots

Task options

Tasks are affected by a number of different options.   These can affect how grades are calculated, so are very important.

Unentered scores

Unentered grades are not normally used for grade calculations.   This allows running averages throughout a semester.   At the end of a semester, you may want to convert unentered scores to zeros. If you wish to do this to the entire class, you can select the option "Unentered scores count as zero".   For those student scores that you always want to count as unentered, you can enter a score below the minimum allowed points (see below).

Truncate vs rounding

Scores can be truncated or rounded.   A value of 2.55 reads 2.5 if truncated and 2.6 if rounded.   The main problem with rounding comes when final grades are determined.   A score of 89.5 may be rounded to 90, but assigned a B (if the cutoff is 90% for an A).   Although the program assigns the correct grade, the rounded grade appears to be higher that it is.

Minimum allowed points

Normally, students do not receive scores below 0 points.   Therefore, the minimum points is set to 0. However, there are cases where scores below 0 can occur.   For example, when z-scores or student t-scores are assigned to tasks, around half of the scores will be below 0.   A second case is where you punish students by giving them negative attendance scores.   You can therefore specify the lowest allowed score.   The nice part of having a value to specify is that any scores below that value are *always* ignored, and hence count like unentered scores.   If a student enters a class late in a semester, you can set the scores of all the missed assignments to -1, and they will not count in averages or weights.

Decimals

You can select how many decimal places the data have when displayed.   There are tasks for data input (regular) and calculated (special) tasks.   The calculated tasks usually need at least one decimal place to be displayed.   You can display a maximum of five decimal places.

See also

Altering or moving tasks
Defining tasks
Manipulating tasks
Options

VAR Grade version

Data from VGW is normally written in a format that only VGW can understand.   However, you can make the program write data in a format that VAR Grade versions 5 or later can understand.   The newer features of VGW, if not supported by VAR Grade, will be converted to data that that program can understand.   In particular, some tasks or database items may be converted to other types.

To change the version for writing files:

- Select "Option".
- Select "VAR Grade version".
- Select the version you want.

See also

File options

Output terms

All text that VGW prints can be changed.   This allows translation into other languages and altering terms that you find unclear or undesirable.   The "Output terms" on many of the windows allows text on that window to be changed.   In some cases, they also allow related text to be altered.

The Main Menu has all the "Output terms" screens on the "Options", then "Output terms" menu.   If you are translating all the text into another language, it is easiest to do them all from this menu.

The changes are written to a file called VGW.INT.   If you want to return to the default text, rename or delete that file before starting VGW.

In addition, the file BWCC.DLL included with the program is in English.   This file controls the wording on buttons such as "Yes",   "No", "OK", and "Cancel",   There are copies of this file available from bulletin boards in several other languages.   The file is produced by Borland, and is used in their products like Paradox for Windows, Borland Pascal, and Borland C and C++, so BWCC.DLL is most likely found in forums devoted to those topics.

See also

International support

Printout options

There is great leeway in VGW about how data can be printed.   The Write Options screen allows you to customize printouts.   To reach this screen, select "Write", then "Options".   You can also reach this screen from some of the printout windows.   For options that should be "checked", the box next to the item should have an "x" or check mark.   "Unchecked" means no check mark in the box.   To change between checked and unchecked, click the <left mouse button> on the box.

Student numbers

VGW normally prints numbers beside the student names.   These help you to tell how many students there are, find students, etc.   However, they are not necessarily meaningful.   You can turn off the printing of these numbers by unchecking "Print student numbers".

Key on printouts and column widths

To conserve space, VGW can print a key of task or attendance numbers at the top of the first page of a printout.   The columns of data, then, are printed with key numbers above the columns.   The default method is to print the name of the item above the column.   This can cause fewer columns to be printed on a page.   You can print a key by checking "Print key at top of class printouts".

An alternative to using a key is to specify the maximum width of the columns.   This value only works when the key is not printed.   If a task or attendance name is longer than this value, the name is wrapped to the next line.   You can specify the value by entering a new value in   "Max column width on printouts".   Note that this value works for attendance, database items, and tasks, but does not affect the widths of the student names, IDs, and sections.

Page breaks

When printing, VGW tries to print as much data on one page as it can.   In some cases, you would rather each group of students on a separate page rather than groups extending over two pages.   The option "Print one section/group per page", if checked, will print one group per page.

Truncate vs rounding

Scores can be truncated or rounded.   A value of 2.55 reads 2.5 if truncated and 2.6 if rounded.   The main problem with rounding comes when final grades are determined.   A score of 89.5 may be rounded to 90, but assigned a B (if the cutoff is 90% for an A).   Although the program assigns the correct grade, the rounded grade appears to be higher that it is.

Minimum allowed points

Normally, students do not receive scores below 0 points.   Therefore, the minimum points is set to 0.   However, there are cases where scores below 0 can occur.   For example, when z-scores or student t-scores are assigned to tasks, around half of the scores will be below 0.   A second case is where you punish students by giving them negative attendance scores.   You can therefore specify the lowest allowed score.   The nice part of having a value to specify is that any scores below that value are *always* ignored, and hence count like unentered scores.   If a student enters a class late in a semester, you can set the scores of all the missed assignments to -1, and they will not count in averages or weights.

Separating sections when printing

By default, VGW separates students into sections when listing scores by section.   If you prefer that the sections should not be separated, this option will cause all students to be written in one group.   Note that this option works only for writing by sections.

Decimals for display

You can select how many decimal places the data have when displayed.   There are tasks for data input (regular) and calculated (special) tasks.   The calculated tasks usually need at least one decimal place to be displayed.   You can display a maximum of five decimal places.

Teacher names

The default teacher name is no name (blank).   If no name is specified, no teacher name appears on printouts.   If you add your name, "Teacher: Your name" will be printed.   Select "Write", then "Teacher name".   All new classes will inherit the teacher name, so you only have to specify it once.

Class names

The default class name is the DOS file name.   If the name is "English", that is probably ok.   However, you may want to change it to "English 101", or something similar.   You can specify a name for the class. That name will be printed on reports instead of the generic one.

- Select "Write".
- Select "Class name for printouts".
- Type in the class name.

Section names

The default section name is "Section #", where # is the number of the section.   You can specify a name for each section of the class.   That name will be printed on reports instead of the generic one.

- Select "Write".
- Select "Section names or comments".
- You could then specify names like "MWF 9-10", or "Room 101", or whatever else you want.

See also

Names and IDs
Options

Printing basics

Printing in VGW can be done from just about any window.   There are two basic printing systems: plots and seating charts, and all other output.

Plots and seating charts

For plots and seating charts, there are five different fonts that you can use.   To select the font:

- Select "Chart".
- Select "Font for chart".

To print the chart:

- Select "Chart".
- Select "Print chart".

Printing data

For all other parts of the program, any Windows fonts can be used.   Selecting the font depends on the window:

For plots (charts):

- Select "Chart".
- Select "Font for data".

For most printouts:

- Select "File".
- Select "Fonts".

or
- Select "View" and "Fonts" (on the Class Data Entry window).

Besides the font, you can also select the font size.

Printing of data is done with:

- Select "File".
- Select "Print".

or, in the plots
- Select "Chart".
- Select "Print data".

You can also copy data to the clipboard or to a file.   The data can then be imported into other programs:

- Select "File".
- Select "Copy".
- Select "to Clipboard" or "to File".   If you copy the data to a file, you must select a file name.

See also

Printing and reports

Writing class data

Printing of the data by section or class prints the names and/or IDs on the left side of the page and the data in columns on the rest of the page.   The data is separated into sections of students, and as much data as will fit is printed on a page.   There are numerous options of what data to print, and how to format it.

Write class data

- Select "Write".
- Select "by Section or class".
- Select one of the choices.

In general, you can print tasks, database items, or attendance.   When viewing the data, you can modify it.   See **Viewing class data**.

Printing task scores

You can print task scores or missed assignments.   For the scores, you select which tasks to print, and in which order.   If there are too many tasks to fit across the page, one set of tasks is printed, then the next set until all the selected tasks are printed.

Printing database items

You can select which database items to print on the printouts.   Like tasks, if there are too many to fit across the page, one set of items is printed, then the next set is printed until all the selected items are printed.

Filtering students

In most cases, you will just want to print data for all students in one or more sections of your class. However, in some cases you will only want to print students that fit some category, such as year in school. To do this *before* you select writing by section, select "Filter through db items".   You then select the db item and the value for filtering.   Only students meeting the criteria will be printed.   This filter remains in effect until you change or remove it.

To remove the filtering, select the filter option, but, when asked for a db item, do not select one. However, you must select "OK" and not "Cancel".   This will remove the filter, and all students will again be printed.

Printing attendance

You can print attendance, days that students have missed, a summary of attendance (how many of each category), a brief summary (some categories are added together), or class attendance totals (how many students in the class had each type).   In each case, as many as possible are printed across the page, with the extra ones printed in a new group.

Subjects

You can specify which classes to print in addition to the current class.   If you selected to print task scores, database items, or attendance, you must select the ones to print from each class.

See also

Printing and reports

Printout Options
Viewing class data
Writing individual data

Writing individual data

Printing of the data by individual prints the names and/or IDs on the top of the page, data in columns down the page. One student is printed for the data.

Writing individual data

- Select "Write".
- Select "by Name".
- Select one of the choices.

In general, you can print tasks and attendance. When viewing the data, you can modify it. See **Viewing individual data**.

Database items on printouts

You can select which database items to print on the printouts. These items are printed after the name and ID, but before the attendance or tasks. You should select the items for the printouts before selecting the other data.

Printing task scores

You can print task scores or missed assignments for a student, and can also print combinations of attendance and tasks. For the tasks to print, you select which tasks to print, and in which order.

For the two options that both print attendance and tasks, the tasks are printed first, then the attendance.

Printing attendance

You can print attendance, days that students have missed, a summary of attendance (how many of each category), tasks and attendance, or tasks and an attendance summary.

Subjects

You can specify which classes to print in addition to the current class. If you selected to print task scores or attendance, you must select the ones to print from each class.

See also

Printing and reports
Printout options
Viewing individual data
Writing class data

Grids

Grids are printouts where the students names and/or IDs are printed along the left side, and empty boxes are printed to the right of the students.   The purpose of grids is to make it easy to enter scores or attendance on paper and then transfer the data to the computer.

- Select "Write".
- Select "Empty grids" to show the grids.   After the grid appears in the window, you can modify it to print how you want.

Sections

If there is more than one section of students in the class, you can print any combination of sections. Select "Section".

Grid size

Selecting "Box size" allows you to select the box size.   Items like attendance probably need small boxes, while database items may need large ones.

Changing text

You can print names, IDs, or a combination of the two.   Select "View".

You can change the text for some of the items by selecting "Output terms".

Printing the grids

To print the grid, select "File", then "Print".   You can also select a different font or printer, or copy the grids to the clipboard or to a file from the File Menu.

See also

Printing and reports
Writing class data

Reports

If you want the program to print data differently than the program normally does, you can do this if you write your own reports called "report forms". A number of report forms are included with the program to show what can be done with them as well as giving you templates that can be modified to more closely match what you need. There are some very powerful things you can do with the reports, but they take some effort to modify them. The manual explains all the commands and how to write forms.

To edit or view a report form:

- Select "Write".
- Select "Reports".

Showing a report form

- Select "Show a report".
- You then select the report form. All the forms included with the program end in ".FRM".
- Next, you are asked to select students. The program doesn't know the purpose of the form. Some forms are designed to print single students. For these, select one or more students to view. Other forms are designed to print the whole class. In either case, only those students you select will be printed. For the reports included with the program, they include popup windows that help explain what the form is doing.
- You are then shown the form. If you want, you can change the font before printing. Note that any font commands in the form will take precedence over the one you select.

Editing a form

To change a form, you can use any text editor or word processor. However, the forms must be in plain text (ASCII). VGW comes with an editor that saves files in plain text. To use it, select "Edit a form". The manual gives more details on using the form. However, you must save the form after editing or displaying the form will not show the latest version.

Extra classes to view

Like printing other reports, if you designate extra subjects to print, you can print data from more than one class. Note that you can also add commands in the forms to print data from different classes. See **Subjects**.

Automatic comments

These comments are used in the forms with one command ("Comment"). For the command to work correctly, you need to enter the cutoffs and comments. If you don't use that command in your forms, nothing needs to be entered.

See also

Printing and reports

Subjects

Subjects are different classes with similar or the same students.   The use of subjects in VGW is for printing purposes.   You can specify a list of subjects to print.   The program will go through the list, starting with the current class (the one being used), then the subjects, in order.   If a student   in the current class is in the subject, the data is printed.   You can specify up to 10 different subjects.

Specifying subjects

There are three places in the program where subjects are designated.   The only difference is where the option is.   After that, the method is the same, and the subjects designated one place work the other places, as well.

To specify subjects, select one of the following:

- "Write", then "by Section or class", then "Extra subjects or classes".
or
- "Write", then "by Name", then "Extra subjects or classes".
or
- "Write", then "Reports", then "Classes or subjects to list".

These are the three major report sections of the program.

- Next, you can select the subjects to list.   One way to pick subjects is to move between the 10 items, typing in the subject name.   The name should include the full DOS path name.   A second, and easier method, is to click on the "Add new subject" button.   You then see the Open class screen, and can pick the desired subject.   You can also replace or delete subjects by clicking buttons.
- After you have selected the subjects you would like to use, select "OK".   VGW will read in the designated class(es).

Printing with subjects

After subjects have been designated, they stay in effect until you exit the program.   When you print, the program cycles through the subjects in order.   If you are in a part of the program where you select which data is to be printed, e.g., tasks, you will be asked, for each subject, which data to print.

See also

Printing and reports
Reports
Writing class data
Writing individual data

Classes

Saving classes

- Select "File".
- Select "Save".

- You can also save the class to a new name by selecting "File".
- Select "Save as".   This causes the program to make a new class with the same data as the original one, and is the equivalent of copying a class.

Renaming a class

- Select "File".
- Select "Rename".
- You select the class you wish to rename, then you enter the new name.

Copying classes

- Select "File".
- Select "Copy".
- You select the class you wish to copy, then you enter the new name.   This differs from rename in that you will now have two copies of the class, one with the old name and one with the new name.

Moving classes

- Select "File".
- Select "Move".
- Select the class you wish to move, then you enter the new directory.   This differs from rename in that this command can move files to different directories or disks, while rename works within one directory.

Recovering classes

If you let VGW make backup copies of the classes, you can recover a class, as well.   Data saved the last time you used the class are not recovered.

- Select "File".
- Select "Recover".
- Select the class you wish to recover.   The files that can be recovered end in ".PAX".   If you recover a class, it is read into the program and becomes the current class.

Deleting classes

- Select "File".
- Select "Delete".
- You then select the class you wish to delete.   Even read-only and hidden classes can be deleted by this procedure.

See also

File options

Viewing class data

When writing data by section or class, you reach the window that displays all the data.   From this window, you can show all the same types of data as the menu choices except for class attendance totals, which has it's own window.

Changing what data to view

Several menu options are available to you.   If you decide to view another type of data, you simply select the new data type.

- Select "Tasks".   Then select the tasks to display.
or
- Select "Attendance".   Then select the days to display.
or
- Select "DB".   Then select the database items to display.

Sections

If there is more than one section of students in the class, and multiple sections is checked, you can select which students to display by selecting "Sections".   See **Sections**.

Subjects

Selecting "Subjects" allows you to specify which classes to display in addition to the current one.   See **Subjects**.

Names and IDs

You can select to view names, IDs, or a combination by selecting "View".

Output terms

The text on the screen can be changed or translated by selecting "Output terms".

Printing

- If you want to print the data that you have displayed, select "File", then "Print".
- If you want to copy the data to the Windows clipboard or to a file, select "File", then "Copy".   Then select "to Clipboard" or "to File".
- You can also change the font used for printing by selecting "File", then "Font".

See also

Printout options
Writing class data

Viewing individual data

When writing data by individual, you reach the window that displays all the data.   From this window, you can display all the student data.

Adding comments

You can type in comments for each student that you list.   The comments can be up to 1024 characters long.   The comments are entered once for the screen, so they cannot be edited after they are added.   The comments will always be displayed after all the other data for that student.   Changing the students viewed will remove the comments.   The comments are not permanent, and will disappear after you leave the window.   To add comments:

- Select "Comments".
- Enter the comments.   Don't use the <Enter> key, as that will signal the end of the comments.   When the comments are viewed, they will be "wrapped" to fill the lines.

Changing what data to view

Several menu options are available to you.   If you decide to view another type of data, you simply select the new data type.

- Select "Tasks".   Then select the tasks to display.
or
- Select "Attendance".   Then select the days to display.
or
- Select "DB".   Then select the database items to display.

Subjects

Selecting "Subjects" allows you to specify which classes to display in addition to the current one.   See **Subjects**.

Names and IDs

You can select to view names, IDs, or a combination by selecting "View".

Output terms

The text on the screen can be changed or translated by selecting "Output terms".

Printing

- If you want to print the data that you have displayed, select "File", then "Print".
- If you want to copy the data to the Windows clipboard or to a file, select "File", then "Copy".   Then select "to Clipboard" or "to File".
- You can also change the font used for printing by selecting "File", then "Font".

See also

Printout options
Writing individual data

Exiting the class

If you select "<AltX>" or "<AltF4>", you can exit VGW.   If any data has been changed and not saved, you will be asked whether to save the data.   *If you select "No", all the data just entered will be lost.*

When data is saved, a backup of the class is normally made.   The backup has the data from the *previous* time you saved the class data.   You can prevent backups from being made.   See **File options**.

Help

VAR Grade for Windows (VGW) has an extensive help system that you are currently viewing.   The help system can be accessed four ways:

Help Menu

- Select "Help".
- Select "Index" from the main menu.   You will be on the first screen of the help file (this file).

Help from the keyboard

- Press "<F1>" from anywhere in the program.   You will be in the same place as the first method.

Context-sensitive Help

- Press "<Ctrl-F1>" from anywhere in the program.   A context-sensitive help screen will pop up.   The screen that you will view will depend upon what part of the program you are currently in.

Help on menu items

- Press "<Shift-F1>" from anywhere in the program.   You then select one of the options on the Main Menu.   Before you select one, a question mark appears next to the cursor (in some parts of the program, the question mark may not appear).   After selecting a menu item, a context-sensitive help screen   will pop up.   The screen that you will view will depend upon what item you selected.

See also

Hints
Tutorial
Support

Hints

VAR Grade for Windows (VGW) has hints that pop up in the program.   The first time you enter a new section of the program, a screen will pop up that will help speed you on your way.   In addition, every time you start the program, a hint will appear that will increase your knowledge of VGW.   When these hints pop up, you can turn them off permanently by selecting the "Turn off hints" button.

When the hint screens pop up, there is also a button marked "Run tutorial".   If you select this button, the hint will disapear, and a tutorial will appear to help you finish your current goal.

If you turned off the hints, but would like them to reappear, select "Help", then "Hints".

See also

> **Help**
> **Tutorial**
> **Support**

Support

VAR Grade for Windows is brought to you by **VARed Software**.   VGW can read and write the classes in VAR Grade format (the MS-DOS based, non-Windows version).   If you have any questions, or find any bugs, you can report them to the addresses below.   Registration and site license information is also available by contacting us.

Single user registration is $50.
Site licenses start at $150.

VARed Software
1490 Calle Fidelidad
Thousand Oaks, CA 91360-6819
USA

Phone: (805) 523-7546
Compuserve: 73427,112
Internet: 73427.112@Compuserve.com

Tutorial

VAR Grade for Windows has a tutorial that is accessible from the program.   Select "Help", then "Tutorial".
The tutorial is a special help file, so it can be used like a help file.

See also

      Help
      Hints
      Support

Database items hold student data such as addresses, gender, or year in school.   Students can be sorted or selected by the items.   The database items can also be printed on the printouts.

A section is a group of students in one classroom.   In college, large classes are typically broken down into sections for problem solving or labs.   In secondary schools, teachers often teach the same subject to more than one class of students.   These classes can be put into one VAR Grade class as different sections.

Tasks include graded assignments such as tests, exams, homework, and term papers.   They also include sums, averages, and other manipulations of student grades.   There are 3 types of tasks used for entering grades (number, letter, and extra credit).   There are 11 other types of tasks (sum, average, percentage, weight, highest, if, user, attendance, attendance extra credit, attendance total, and final).   These last tasks convert assignments or attendance into number or letter grades.

A spreadsheet style data entry screen has cells organized into rows and columns. You can move from cell to cell by using the arrow keys or a mouse. Some of the cells are calculated or protected, so these appear different from the others.

Grade cutoffs are the minimum score needed to obtain that grade.   They are different from the grade values, which are the points the grade is counted when calculating grades.

A string has up to 40 characters.   Any type of character can be in strings.   Strings are used for most types of data, including addresses, comments, and nicknames.

Memos are like strings, but have over 40 characters.   They are usually used for long comments about students.   They are different than strings in that, when printed, they can print on over one line.

An integer is any non-decimal number.   In VGW, the values integers can have range from +2,147,483,647 to -2,147,483,648.   This database type is commonly used for things like year in school and age.

Dates are entered with numbers in the format xx/xx/xx, where xx can be the day, month, and year.

Boolean values are Yes and No.   For data input, valid values are "Y" and "N".   These correspond to True and False, respectively.

Characters are one character long.   When defining these database items, you specify up to 15 valid characters for the field.   This allow the program to check when data is entered.   If you don't want checking, define a string item instead of a character.

Flat files have data in columns.   The columns are separated by spaces or tabs.

Comma and quote files are ones where the data is separated by commas.   If the data has a comma in it, double quotes are used to keep the data together.

Percentiles is a type of class ranking where the value gives the percent of other scores that are lower than that student.   They range from a high of 99% to a low of 0%.

Standard deviations are a measure of how far away the student is from the mean score.   Assuming a normal or bell-shaped distribution of scores, approximately two-thirds of the students have values from +1 to -1, while 95% have values from +2 to -2.

T-scores are calculated by multiplying the standard deviations (z-scores) by 10, and adding 50. The mean T-score, therefore, is 50. These adjust the z-scores to give a more understandable number.

These are similar to standard deviations, but assume a small sample (few students). The implied distribution is like a normal distribution. A value of 0 is at the mean, with numbers further from 0 being further from the mean.

VARed Software has been producing and selling software for educators since 1988.   "Grading tools for Teachers" has been the apt description of our first product VAR Grade.   VAR Grade for Windows extends that description.