**Example: Rating College Football Teams**

**Set up the Rating model in Excel:**

|  |
| --- |
| =VLookup(F6,B$12:C$135,2,False)  – VLookup(G6,B$12:C$135,2,False) + B$3  =(J6-K6)^2  =H6-I6  =average(C12:C135)  =sum(L6:L685) |
| … |
|  |
| … |
|  |

**Specify Solver:**

Set Objective: F2

To: ○ Max X Min ○ Value of: \_\_\_\_\_\_\_\_\_

By Changing Variable Cells: C12:C135,B3

Subject to the Constraints:

|  |
| --- |
| B6=B8 |

□ Make Unconstrained Variables Non-Negative

Select a Solving Method: GRG Nonlinear

**Solver Results:**

|  |
| --- |
|  |
| … |
|  |
| … |
|  |

The procedure used in this example is practically identical to the procedure used in the Jeff Sagarin NCAA football ratings, which is one of the six computer rankings used in calculating the BCS Average.

Two main reasons that our rating results are different from the real Jeff Sagarin NCAA football rating results submitted to BCS.

* In the real Jeff Sagarin NCAA football ratings, both Division I FBS and Division I FCS teams are considered, i.e., 246 teams instead of 124 teams are considered.
* In the real Jeff Sagarin NCAA football ratings, only winning and losing matters, i.e., the score margin is of no consequence, which makes it very "politically correct".

Find out more about the Jeff Sagarin NCAA football ratings at <http://usatoday30.usatoday.com/sports/sagarin/fbt12.htm>