# Creating a Business Analytics Class: Furman's Experience

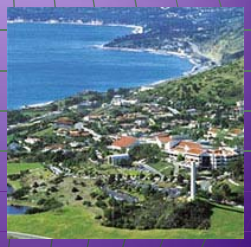
Kirk Karwan
Department of Business & Accounting
Furman University

FURMAN

## So What is a 'Furman'?

- Private, liberal arts, all undergraduate
- In Greenville, SC along I-85
- Business program, Economics dept., no statistics department
- Division I Sports

## So What is a 'Pepperdine'?



## My Current Undergraduate Class at Furman

- BUS 337 – Business Analytics I
- Last spring, 28 juniors and seniors, heavily Business Administration majors. Spring 2014, to be similar
- Background primarily limited to an introductory economics-based statistics course

## Approach

- A course about descriptive and (primarily) predictive analytics
- Using Evans Business Analytics text and Frontline Systems XL Miner software

## Initial Concerns

- A return to yesteryear – student interest had waned for a long time
  - Student experience with statistics
- Student capabilities
- Readily available materials
- Accommodation of both methods AND interpretation/understanding

## The Very Good News

- As students learn descriptive statistics using EXCEL, their quantitative thinking, abilities, and confidence all increased quickly.
- Student interest (even excitement) increased with relevant examples! Athletics, college admissions, credit scoring, market segmentation, etc.

## Dealing with the Danger…

- Most students will know less than they think they do. Be aware of their willingness to over-interpret (or, not interpret at all). This offers a good opportunity to explain what statistics and analysis IS and IS NOT!

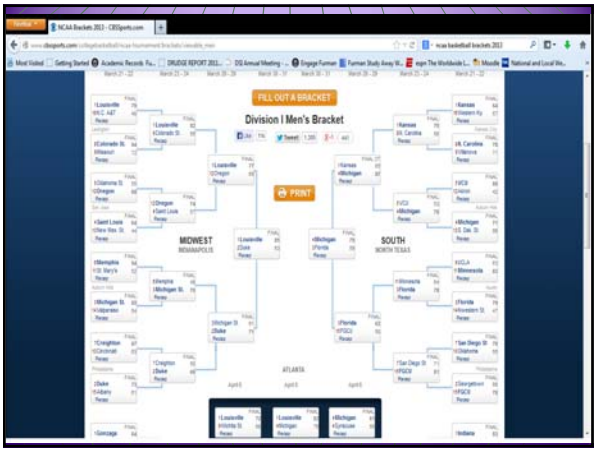
## A Caution Thus Far…

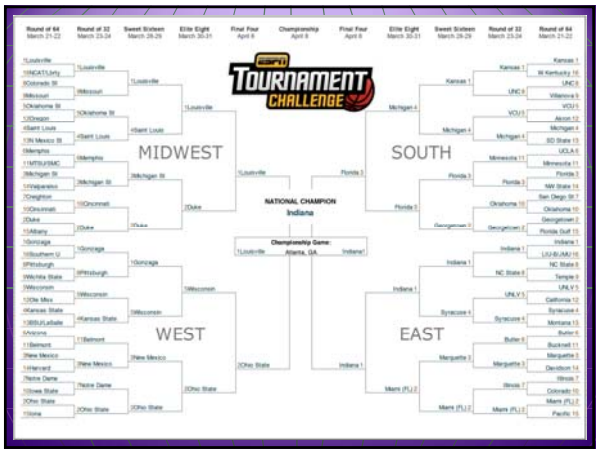
- Do not get lost in the technical terminology. Business students will not get it. The examples are rich in context and in terms of 'neural feedback', so emphasize context and move concepts in slowly.

## Anecdotes on Muddling Through

- Making it 'sexy'.
  - The Target Example
  - Sports data – MoneyBall
- Making the data gathering component real
  - NCAA Basketball – the right time of the year!

## How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did




TOURNAMENT CHALLENGE
MIDWEST
WEST
SOUTH
EAST
NATIONAL CHAMPION
Indiana
Championship Game:
Atlanta, GA

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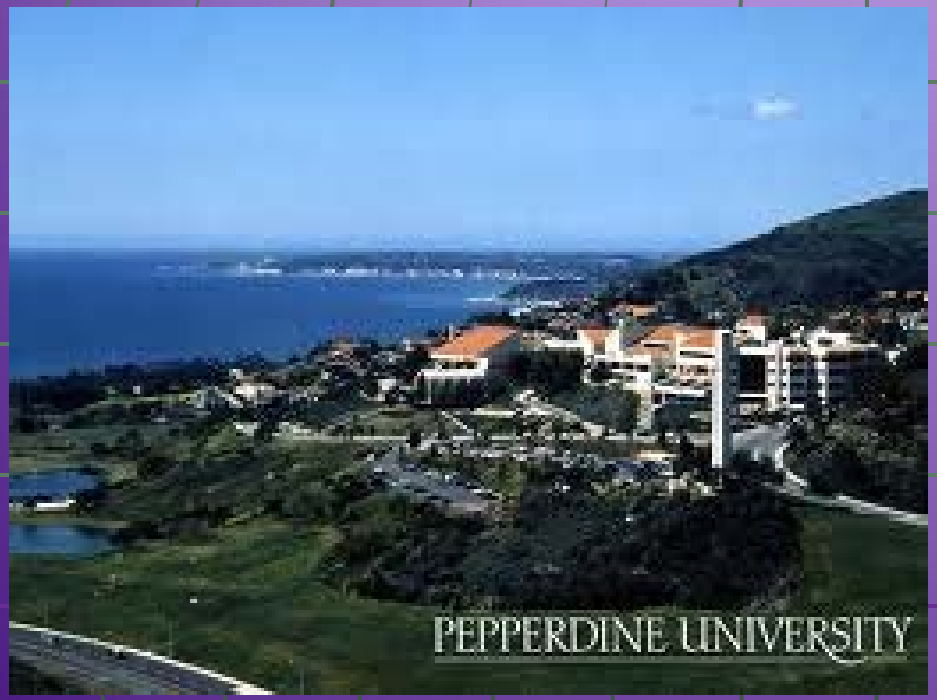

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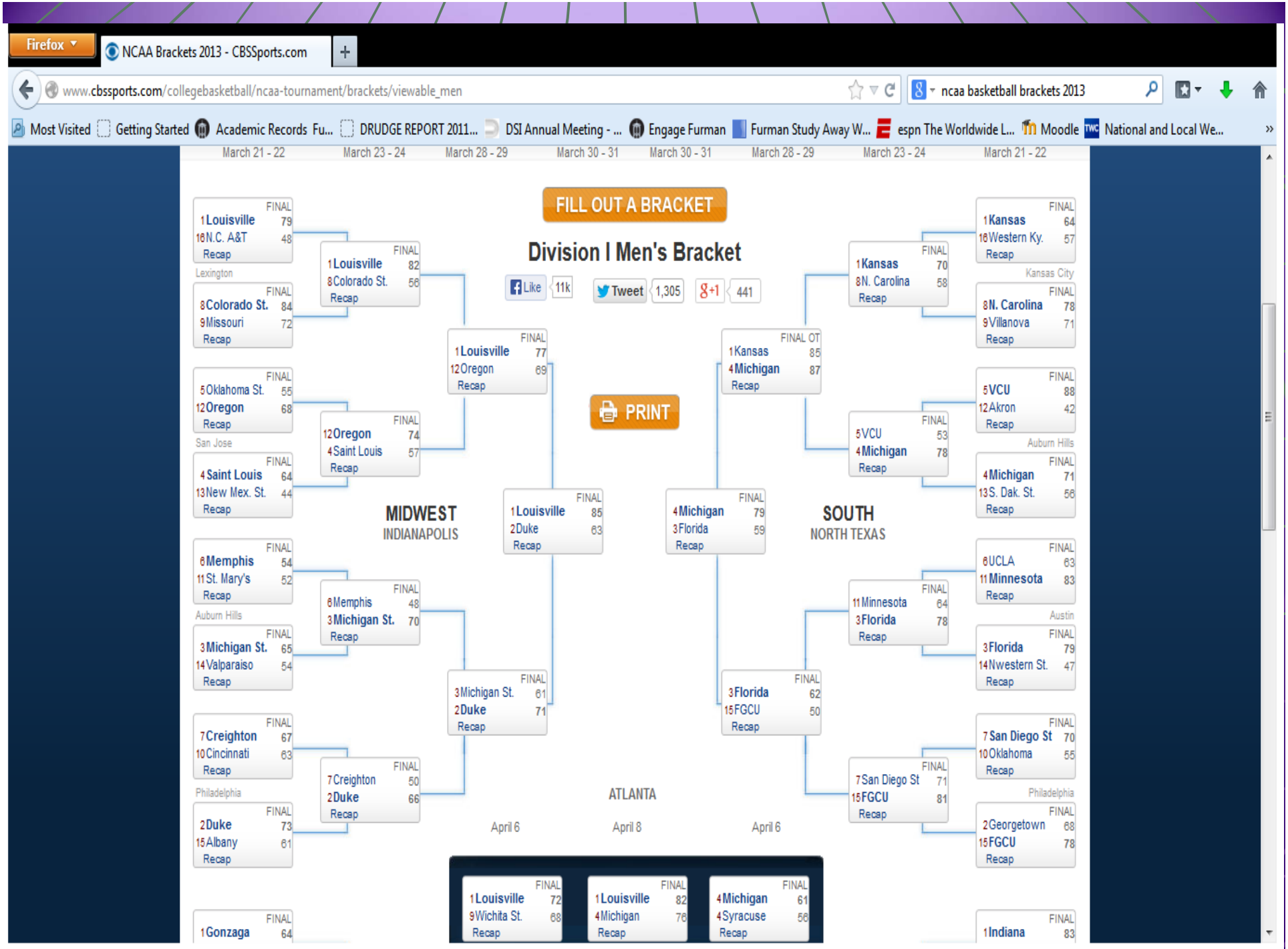
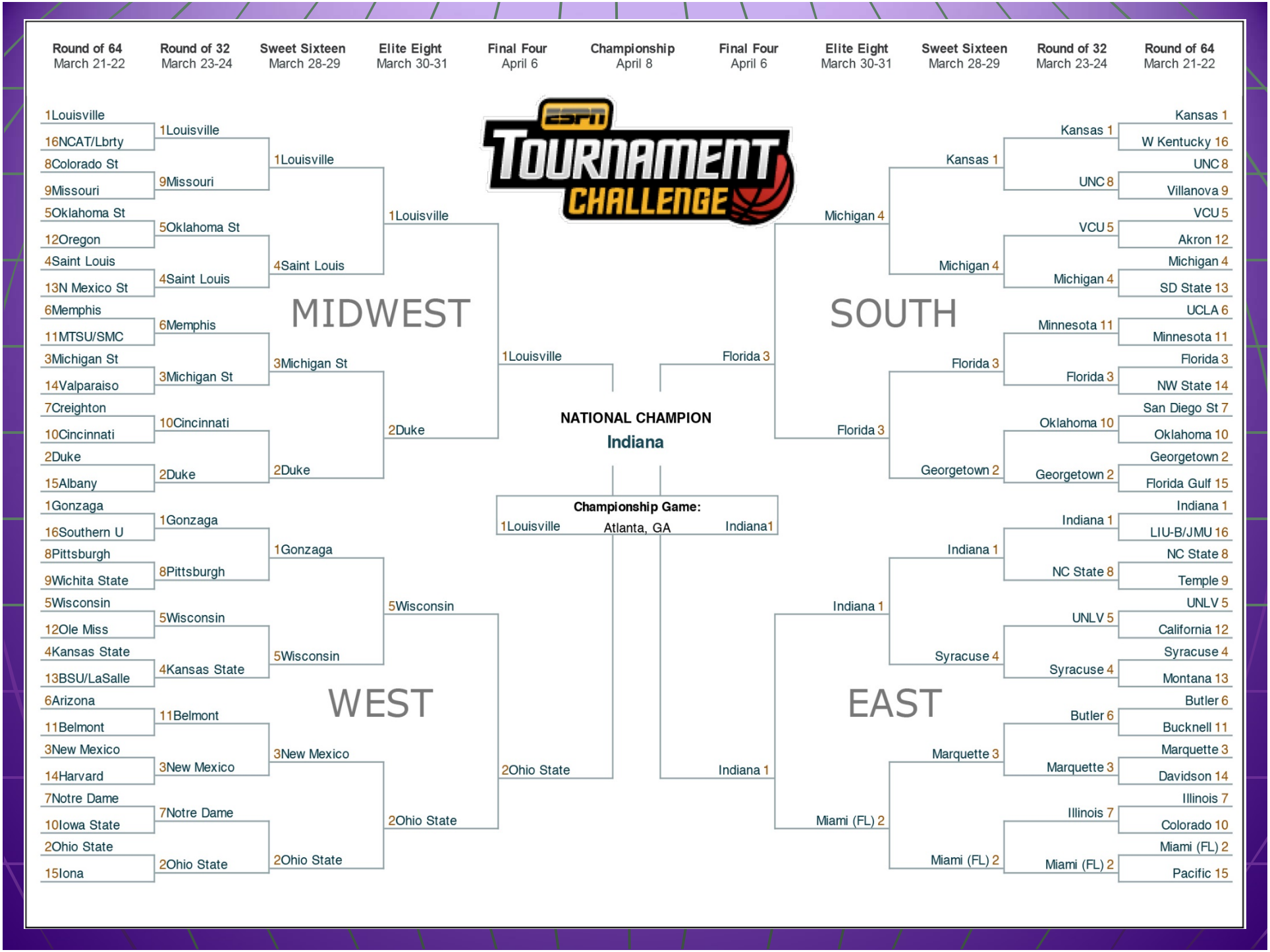

Firefox
NCAA Brackets 2013 - CBSSports.com
www.cbssports.com/collegebasketball/ncaa-tournament/brackets/viewable_men
ncaa basketball brackets 2013
Most Visited
Getting Started
Academic Records Fu...
DRUDGE REPORT 2011...
DSI Annual Meeting - ...
Engage Furman
Furman Study Away W...
espn The Worldwide L...
Moodle
National and Local We...
March 21 - 22
March 23 - 24
March 28 - 29
March 30 - 31
March 30 - 31
March 28 - 29
March 23 - 24
March 21 - 22
FILL OUT A BRACKET
Division I Men's Bracket
Like 11k
Tweet 1,305
+1 441
PRINT
MIDWEST
INDIANAPOLIS
SOUTH
NORTH TEXAS
ATLANTA
April 6
April 8
April 6
1 Louisville 79
16 N.C. A&T 48
Recap
8 Colorado St. 84
9 Missouri 72
Recap
5 Oklahoma St. 55
12 Oregon 68
Recap
4 Saint Louis 64
13 New Mex. St. 44
Recap
6 Memphis 54
11 St. Mary's 52
Recap
3 Michigan St. 65
14 Valparaiso 54
Recap
7 Creighton 67
10 Cincinnati 63
Recap
2 Duke 73
15 Albany 61
Recap
1 Gonzaga 64
1 Louisville 82
8 Colorado St. 56
Recap
12 Oregon 74
4 Saint Louis 57
Recap
6 Memphis 48
3 Michigan St. 70
Recap
7 Creighton 50
2 Duke 66
Recap
1 Louisville 77
12 Oregon 69
Recap
3 Michigan St. 61
2 Duke 71
Recap
1 Louisville 85
2 Duke 63
Recap
1 Louisville 72
9 Wichita St. 68
Recap
1 Louisville 82
4 Michigan 76
Recap
4 Michigan 61
4 Syracuse 56
Recap
1 Kansas 64
16 Western Ky. 57
Recap
1 Kansas 70
8 N. Carolina 58
Recap
8 N. Carolina 78
9 Villanova 71
Recap
5 VCU 88
12 Akron 42
Recap
5 VCU 53
4 Michigan 78
Recap
4 Michigan 71
13 S. Dak. St. 56
Recap
6 UCLA 63
11 Minnesota 83
Recap
11 Minnesota 64
3 Florida 78
Recap
3 Florida 79
14 Nwestern St. 47
Recap
7 San Diego St 70
10 Oklahoma 55
Recap
7 San Diego St 71
15 FGCU 81
Recap
2 Georgetown 68
15 FGCU 78
Recap
1 Indiana 83
1 Kansas 85
4 Michigan 87
Recap
4 Michigan 79
3 Florida 59
Recap
3 Florida 62
15 FGCU 50
Recap
Lexington
Kansas City
San Jose
Auburn Hills
Auburn Hills
Austin
Philadelphia
Philadelphia


Round of 64 March 21-22
Round of 32 March 23-24
Sweet Sixteen March 28-29
Elite Eight March 30-31
Final Four April 6
Championship April 8
Final Four April 6
Elite Eight March 30-31
Sweet Sixteen March 28-29
Round of 32 March 23-24
Round of 64 March 21-22
ESPN TOURNAMENT CHALLENGE
MIDWEST
1Louisville
16NCAT/Lbrty
8Colorado St
9Missouri
5Oklahoma St
12Oregon
4Saint Louis
13N Mexico St
6Memphis
11MTSU/SMC
3Michigan St
14Valparaiso
7Creighton
10Cincinnati
2Duke
15Albany
WEST
1Gonzaga
16Southern U
8Pittsburgh
9Wichita State
5Wisconsin
12Ole Miss
4Kansas State
13BSU/LaSalle
6Arizona
11Belmont
3New Mexico
14Harvard
7Notre Dame
10Iowa State
2Ohio State
15Iona
SOUTH
Kansas 1
W Kentucky 16
UNC 8
Villanova 9
VCU 5
Akron 12
Michigan 4
SD State 13
UCLA 6
Minnesota 11
Florida 3
NW State 14
San Diego St 7
Oklahoma 10
Georgetown 2
Florida Gulf 15
EAST
Indiana 1
LIU-B/JMU 16
NC State 8
Temple 9
UNLV 5
California 12
Syracuse 4
Montana 13
Butler 6
Bucknell 11
Marquette 3
Davidson 14
Illinois 7
Colorado 10
Miami (FL) 2
Pacific 15
NATIONAL CHAMPION
Indiana
Championship Game:
1Louisville
Atlanta, GA
Indiana1