

**The Ohio State University  
Colleges of the Arts and Sciences New Course Request**

Department of Statistics

Academic Unit

Stat

Book 3 Listing (e.g., Portuguese)

201.01 Statistics in the Sports World

Number Title

STATS IN SPORTS WORLD

U

3

18-Character Title Abbreviation

Level

Credit Hours

Summer

Autumn x

Winter

Spring

Year 2007

Proposed effective date, choose one quarter and put an "X" after it; and fill in the year. See the OAA curriculum manual for deadlines.

**A. Course Offerings Bulletin Information**

Follow the instructions in the OAA curriculum manual. If this is a course with decimal subdivisions, then use one New Course Request form for the generic information that will apply to all subdivisions; and use separate forms for each new decimal subdivision, including on each form the information that is unique to that subdivision. If the course offered is less than a quarter or a term, please complete the Flexibly Scheduled/Off Campus/Workshop Request form.

Description (not to exceed 25 words):

Ask and answer questions, debate issues, and analyze data from your favorite sports using statistics. Statistical techniques include contingency tables, regression, estimation, confidence intervals, testing.

Quarter offered:

AU

Distribution of class time/contact hours: 2 - 72 minute labs (no lectures)

Quarter and contact/class time hours information should be omitted from Book 3 publication (yes or no): NO

Prerequisite(s): One GEC course in Statistics or equivalent

Exclusion or limiting clause: Not to be taken as a replacement for a GEC course in Statistics.

Repeatable to a maximum of 0 credit hours.

Cross-listed with: N/A

Grade Option (Please check): Letter  S/U  Progress  What course is last in the series? N/A

Honors Statement: Yes  No

GEC: Yes  No

Admission Condition

Off-Campus: Yes  No

EM: Yes  No

Course: Yes  No

Embedded Honors Statement: Yes  No

Other General Course Information:

(e.g. "Taught in English." "Credit does not count toward BSBA degree.")

**B. General Information**

Subject Code 270303 (Statistics, General)

Subsidy Level (V, G, T, B, M, D, or P) B

If you have questions, please email Jed Dickhaut at [dickhaut.1@osu.edu](mailto:dickhaut.1@osu.edu).

1. Provide the rationale for proposing this course:

The GEC statistics courses develop the necessary tools to answer questions and solve problems at the introductory level. Applications come in a variety of areas, and typically come after the concepts are learned. To achieve this goal, these courses typically present the concepts, practice them, and apply them to a variety of settings. The next step is to be able to identify and the statistical skills and techniques needed to explore a particular area of interest, and then apply those skills and techniques correctly to come up with conclusions. That is, to use statistics as the tool for exploring a particular area of real interest. Statistics in the Sports World delves into the area of sports, a very popular topic among undergraduates (especially at OSU!) Students will ask and answer questions, debate issues,

to ABC  
3-23

and analyze data from a variety of sports using statistics. Specific sports covered will include the major U.S. sports (football, baseball, and basketball) along with other sports based on current interests and events. For example, Winter Olympics sports (such as skating and skiing); Summer Olympics sports (such as soccer and track/field); and other sports such as golf, bowling, or even curling. Stat 201.01 builds on the statistical ideas covered in the GEC statistics courses and uses them as tools to explore questions about sports. For example: Who is the best power hitter in baseball and why? How are the BCS rankings calculated and do you agree with the process? How can you tell whether Olympic judges produce biased scores? How should you fill out your brackets for the NCAA basketball tournament? How long do you predict it will take to break the world record for the 100 yard dash, and will there ever be a speed record that can never be beaten? Through the exploration of sports, we are promoting life skills of using statistics to answer questions; and we are doing it within a real-world area that students are (and will continue to be) very much interested in. These questions, in total, will use all the statistical tools learned in the GEC statistics course in order to answer. The trick is to determine which tools to apply when, and how to use them appropriately to answer the questions. That is the underlying focus of Stat 201.01.

2. Please list Majors/Minors affected by the creation of this new course. Attach revisions of all affected programs. This course is (check one):  Required on major(s)/minor(s)  A choice on major(s)/minors(s)  An elective within major(s)/minor(s)  **Not Applicable**

3. Indicate the nature of the program adjustments, new funding, and/or withdrawals that make possible the implementation of this new course.

The Department of Statistics is providing the funding for this course and its development, as well as the staff to teach the course.

4. Is the approval of this request contingent upon the approval of other course requests or curricular requests?

Yes  No  List: Statistics 201; Statistics in Your World. (Statistics 201.01 falls under the general heading of Stat 201.)

5. If this course is part of a sequence, list the number of the other course(s) in the sequence: N/A

6. Expected section size: 40 Proposed number of sections per year: 1

7. Do you want prerequisites enforced electronically (see OAA manual for what can be enforced)? Yes  No

8. This course has been discussed with and has the concurrence of the following academic units needing this course or with academic units having directly related interests (List units and attach letters and/or forms):  
Not Applicable

9. Attach a course syllabus that includes a topical outline of the course, student learning outcomes and/or course objectives, off-campus field experience, methods of evaluation, and other items as stated in the OAA curriculum manual and e-mail to [accurofc@osu.edu](mailto:accurofc@osu.edu).

Approval Process The signatures on the lines in ALL CAPS ( e.g. ACADEMIC UNIT) are required.

1.  MICHAEL FLIGNER 3/14/07  
Academic Unit Undergraduate Studies Committee Chair Printed Name Date

2. \_\_\_\_\_ Printed Name Date

3.  Douglas A. Wolfe 3/14/07  
ACADEMIC UNIT CHAIR/DIRECTOR Printed Name Date

4. After the Academic Unit Chair/Director signs the request, forward the form to the ASC Curriculum Office, 105 Brown Hall, 190 West 17<sup>th</sup> Ave. or fax it to 688-5678. Attach the syllabus and any supporting documentation in an e-mail to [accurofc@osu.edu](mailto:accurofc@osu.edu). The ASC Curriculum Office will forward the request to the appropriate committee.

5. \_\_\_\_\_ Printed Name Date