Undergraduate Committee Annual Report 2011 – 2012

- **Undergraduate Program:**
  - Undergraduate Majors: 115 in fall 2011, 115 in spring 2012
  - Honors and Awards
    - 49 undergraduate majors made Dean’s List (GPA of 3.50 or above for 12 or more credits) for fall 2011 and 46 made Dean’s List for spring 2012.
    - Lendie Follett (STAT), Yuan Li (STAT), Rui Lu (STAT), Erin Pauly (MATH/STAT), Xinao Sun (STAT), My Tran (STAT), and Lingwei Zhao (MATH/STAT) were elected to the Phi Beta Kappa Honor Society.
    - Wenting He, Kaylin Kelchen, Yuanrong Xu graduated Cum Laude (gpa 3.50 to 3.69)
    - Xu Feng, Yiting Li, Yuan Li, Sijing Shao, Xinao Sun, My Tran, Justin Zaugg and Enming Zhang graduated Magna Cum Laude (gpa 3.70 to 3.89).
    - Qiuting Hu, Chen Hua, Rui Lu and Lingwei Zhao graduated Summa Cum Laude (gpa 3.90 or higher).
  - Graduates and First Activity:
    - Wenting He (SS 11)
    - Kaylin Kelchen (SS 11) Statistical Analyst, Rain and Hail Agricultural Insurance, Johnston, IA
    - Minjoung Kim (SS 11)
    - Qiuting Hu (F 11 other major Mathematics) Applying to graduate school.
    - Anna Kye (F 11) Applying to graduate school.
    - Chee Bing Loh (F 11) Returning to Malaysia.
    - Rui Lu (F 11) MA program in Statistics, Columbia University, New York, NY.
    - Shengnan Ma (F 11) Applying to graduate school.
    - Robert Tegeler (F 11) Financial analyst, Principal Financial Group, Des Moines, IA.
    - Chong Bian (S 12 other major Accounting)
    - Brandon Butcher (S 12)
    - Nicholas Corbin (S 12)
    - Xu Feng (S 12 other major Mathematics) MS program in Computational and Mathematical Engineering, Stanford University, Stanford, CA.
    - Lendie Follett (S 12) Ph.D. program in Statistics, Iowa State University, Ames, IA.
    - Yu Gu (S 12)
    - Chen Hua (S 12 other major Mathematics) Ph.D. program in Statistics, Iowa State University, Ames, IA.
- Yiting Li (S 12 other major Accounting) Animation Producer, Studio TTThunder, Hangzhou, China.
- Yuan Li (S 12) M.S. program in Actuarial Science, University of Waterloo, Waterloo, Canada.
- Sijing Shao (S 12 other major Mathematics) MS program in Mathematics, New York University (Courant Institutes), New York, NY.
- Nicholas Spyrison (S 12)
- Xinao Sun (S 12) M.S. program in Actuarial Science, Columbia University, New York, NY.
- My Tran (S 12 other major Finance) Financial Institution Specialist, FDIC, Sioux City, IA.
- Xun Wen (S 12)
- Yuanrong Xu (S 12 other majors Economics and Mathematics) Ph.D. program in Economics, University of Illinois at Chicago, Chicago, IL.
- Wenfeng Xue (S 12) Looking for an internship and applying to graduate school.
- Justin Zaugg (S 12)
- Enming Zhang (S 12 other major Finance) M.S. program in Actuarial Science, Columbia University, New York, NY.
- Lingwei Zhao (S 12 other major Mathematics) M.S. program in Financial Mathematics, University of Chicago, Chicago, IL.

- Undergraduate Scholarships and Awards 2012 – 2013
  - George W. Snedecor Undergraduate Statistics Award
    - Caleb Miller
    - Erin Pauly
  - Herta and H.T. David Scholarship
    - Xizi Shi
  - Schillmoeller Family Scholarship
    - Caleb Miller
    - Bronson Recker
  - Charlie and Barb Hunt Scholarship
    - Erin Pauly
  - Undergraduate Scholarship
    - Stephanie De Graaf
    - Erin O’Donnell
  - JAK Scholarship
    - Bronson Recker

- **Service Teaching:**

  The Committee approved the texts authored by faculty members in the Department for use in the following courses. Professor Marasinghe did not participate in the discussion or vote on his text.
Stat 105 and Stat 305; Basic Engineering Data Collection and Analysis by Vardeman and Jobe, Duxbury/Thomson Learning.


Stat 479; SAS for Data Analysis by Marasinghe and Kennedy, Springer.

A summary of numbers of students enrolled in statistics courses (100 to 399) appears in an accompanying report. The largest enrollment courses are Stat 101 (1063), Stat 226 (1028), Stat 104 (580), Stat 326 (558) and Stat 305 (498). Enrollment in Business Statistics courses declined from 2008-09 through 2010-11 but rebounded a bit in 2011-12. All of the Engineering Statistics courses showed increased enrollment in 2011-12 except for Stat 105. Enrollment in the undergraduate probability and statistics theory sequence continued to increase. The two sections of Stat 341 and one section of Stat 342 had an average enrollment of 50 students per section.

Changes to the Undergraduate Program and Course Offerings for 2013 Catalog

Undergraduate Program

- Change the undergraduate major requirement from Stat 101, 104 or 226 to 201. If a student takes Stat 101, 104 or 226 before declaring a statistics major, that course can be substituted for Stat 201 with permission of the Director of Undergraduate Studies.
- Change the undergraduate major requirement from Stat 401 to Stat 301.
- Change the requirement of “at least two additional courses in statistics at the 400 level or above” to “at least six additional credits in statistics at the 400 level or above”
- Change the prerequisite for 400 level statistics courses that currently have Stat 401 to a prerequisite of Stat 301 or 326 or 401.
- Offer Stat 342 both fall and spring semesters.
- Offer Stat 404 both fall and spring semesters.

New Undergraduate Courses


- STAT 301. Intermediate Applied Statistics. (3-2) Cr. 4, F, S. Prereq: STAT 101 or STAT 104 or STAT 105 or STAT 201 or STAT 226. Statistical methods for analyzing and interpreting numerical data. Statistical models for numerical responses; estimation; hypothesis testing with continuous and discrete data; simple linear and multiple linear regression and correlation; residuals; outliers; leverage; influential points; multicollinearity. Model
• **STAT 444. Bayesian Data Analysis.** (3-0) Cr. 3. S. Prereq: STAT 301, STAT 326 or STAT 401 and STAT 447 or credit or enrollment in STAT 342. Probability models and prior distributions; updating priors through the likelihood function. Computational and simulation-based methods for deriving posterior distributions and for estimating parameters. Basic statistical and hierarchical models. Model adequacy and posterior predictive checks. Markov Chain Monte Carlo methods and introduction to WinBUGS or similar software. Emphasis on applications and examples from the social, biological and physical sciences. Non-major graduate credit.