Math Comps Preferences

Math and math/stats majors in the class of 2017 should return this form to Katie St. Clair by noon on Friday, April 29. All of the information on this form will be kept confidential. While we will try to honor everyone’s preferences, there may be situations in which we cannot.

Name: __________________________________________________

Please circle the mathematics/statistics courses that you will have completed by the end of your junior year:

241 Ordinary Differential Equations
244 Geometries
245 Applied Regression Analysis
251 Chaotic Dynamics
255 Survey Sampling
261 Functions of Complex Variable
265 Probability
275 Statistical Inference
280 Statistical Consulting
295 Cryptography, Coding Th., and Comp. (Occhipinti)
295 Set Theory Seminar (Nelson)
295 Differential Forms and Vector Calculus (Patterson)
295 Topics in the History of Mathematics (Kennedy)
312 Elementary Theory of Numbers
315/365 Stochastic Processes (Dobrow)
315 Advanced Statistical Modeling (Chihara)
321 Real Analysis I
331 Real Analysis II
332 Advanced Linear Algebra
333 Combinatorial Theory
341 Fourier Series
342 Abstract Algebra I
344 Differential Geometry
349 Methods of Teaching Math
352 Topics in Abstract Algebra (Spring ’15 Egge)
352 Topics in Abstract Algebra (Spring ’16 Krusemeyer)
361 Complex Analysis
395 Topics in Combinatorics (Spring ’16 Egge)

What additional courses do you plan to complete your senior year?

Will you be away from campus for one or more terms next year? Which terms? Why?

If you took any math/stat independent studies or math/stat courses elsewhere (e.g., Budapest), please list its title(s) or description(s):

Contact Katie St. Clair if there are students you would have great difficulty working with.
Please indicate the order in which you prefer these projects, with 1 being your first choice. **Please rank all choices until you rank Independent Comps and then you may stop.** Descriptions and additional prerequisite information are available online.

____  **Spatial Statistics**, Laura Chihara, Fall/Winter
Prerequisites: Math 245 and Math 275

____  **Using Singapore Math to teach Algebra in the Northfield Middle School**, Deanna Haunsperger, Fall/Winter
Prerequisites: no prerequisites other than an interest in education

____  **Explorations of factorizations of some polynomial iterates**, Rafe Jones, Winter/Spring
Prerequisites: Math 342 or equivalent experience. See additional information online.

____  **Directed Reading in Elliptic Functions and Modular Forms**, Mark Krusemeyer
Fall/Winter or Winter/Spring (circle one or both)
Prerequisites: Math 361 or 261 or 351; Math 342 highly recommended

____  **Directed Reading in Analytic Number Theory**, Mark Krusemeyer
Fall/Winter or Winter/Spring (circle one or both)
Prerequisites: Math 312; Math 321 highly recommended. See additional requirements online.

____  **Mathematical and Computational Modeling of Neural Systems**, Sam Patterson, Fall/Winter
Prerequisites: no prerequisites but the project would benefit from group members with experience in Math 241, 251, 321, Graph Theory or Computer Programming.

____  **Time Series Modeling for Climate Data**, Andy Poppick, Winter/Spring
Prerequisites: Math 245 and Math 275

____  **S-GAP SHIFTS**, Liz Sattler, Winter/Spring
Prerequisites: Math 321 (Real Analysis I)

____  **The ABCDs and EFGs of classifying Lie algebras over C**, Peri Shereen, Fall/Winter
Prerequisites: Math 332 (Advanced Linear Algebra)

____  **Statistical Analysis of Networks**, Katie St. Clair, Winter/Spring
Prerequisites: Math 275 and either Math 245 or a CS course

____  **Data Analysis Using Topology**, Helen Wong, Winter/Spring
Prerequisites: Math 295 (Low-dimensional Topology, offered next fall) or Math 342 or equivalent.

____  **Independent Comps**
Circle: 3 credits or 6 credits

Is there anything else we should know about your comps preferences?