# Approved Cluster Courses for the Statistics Major

## CLUSTER COURSE CRITERIA

The applied cluster is a chance to learn about areas in which Statistics can be applied, and to learn specialized techniques not taught in the Statistics Department. You need to design your own Applied Cluster. <u>The courses should have a unifying theme.</u> Picking your own applied cluster is a valuable exercise that gives you a chance to explore and refine your interests and to develop a coherent course of study. A pre-approved list has been provided below. However, it is not exhaustive. If you would like to use a course that is not on the list, the Undergraduate Major Faculty Advisor must approve it. Your cluster may consist of courses from more than one department, but your choices should reflect a theme so that you study some area of application in breadth and depth. Cluster courses should meet the following criteria:

Generally,
a.   Courses must be upper division courses and at least 3 units.
b.   Courses in the biological and physical sciences, Chemistry and Engineering are often acceptable.
c.   Courses in social sciences must be quantitative.
d.   Courses with statistics prerequisites are often acceptable.
e.   Courses that are similar to courses offered in the Statistics department are not acceptable.
f.   Courses that primarily teach how to use a particular software package are not acceptable.
g.   Courses that focus on the use of spreadsheet software (e.g. UGBA 104) are not acceptable.
h.   Courses should be taken in the "home" department. For instance, economics classes should be taken in the economics or business department.
i.   Seminars and Special topics courses require approval by the Undergraduate Faculty Advisor.

## APPROVED CLUSTER COURSES
Any three of the courses below may be used as a cluster. This is not an exhaustive list.

- Anthropology: C103, 115, 121C, C124C/IB C187, 127A, 127B, C129D/IB C155, C129F/L&S C140U, C131/EPS C171, 132, 132A, 135, 135B, 169B
- Architecture: 140, 150, 154
- Astronomy: All that meet the criteria above
- Bioengineering: All that meet the criteria above
- Chemical and Biomolecular Engineering: All that are at least 3 units
- Chemistry: All that meet the criteria above
- City and Regional Planning: 118AC, 119
- Civil and Environmental Engineering: All that meet the criteria above
- Cognitive Science: C100, C101, C102, C110, C124, C126, C131, C140, C147
- Computer Science: All that meet the criteria above, except 174
- Demography: 110, C175
- Earth and Planetary Science: All that meet the criteria above, except C100, C120
- Economics: 101A, 101B, C102, C103, 104, 119, 121, C125, 126, 131, 136*, 138, 141, 174, C175 or N175, 181, C181, 182
- Electrical Engineering: All that meet the criteria above
- Energy and Resources Group: C100, 102, C130, 175
- Engineering: 115, 117, 120

## APPROVED CLUSTER COURSES (cont.)

- Environmental Economics and Policy:  C101, C102, C115, 131, 140AC, 141, 142, 143, 145, 147, C151, 152, 153, 154, 161, 162, C175, C181, C183
- Environmental Sciences: 100, 125
- Geography: C139, 140A, 142, 143, 144, C145, 148, C188
- Industrial Engineering: 115, 130, 131, 140, 150, 151, 153, 160, 162,166, 170, 171
- Integrative Biology: C101+C101L, 102+102LF, 103, 104, 106, 106A, C107, 113L, 115, 117+117LF, 118, 119, 123A, C125L, 127+127L, 128, C129L, 131, 132, 135, 137, 138, C139, 140, C142L, C143A, C143B, C144, 146, 148, C149, 151, 152, 153, 153LF, 154, C155, C156, 157LF, 158LF, 160, 161, 162, 163, 164, 165, 166, 168+168L, 169, 173+173LF, 174+174LF, 175+175LF, 181, 183, 184+184L, C185L, C187
- Interdisciplinary Studies: C101
- Landscape Architecture & Environmental Planning: 122, 132, C188
- Letters and Science: 170AC
- Linguistics: 100, C109, 110, 113, 140, C147, C160
- Mathematics: All that meet the criteria above
- Mechanical Engineering: All that meet the criteria above
- Media Studies: none
- Molecular and Cell Biology: All that meet the criteria above
- Music: 108, 108M, 109
- Nuclear Engineering: All that meet the criteria above
- Nutritional Science and Toxicology: All that meet the criteria above
- Philosophy: 128, 140A, 140B, 142, 146, 148
- Physical Education: C129, C165
- Physics: All that meet the criteria above
- Plant and Microbial Biology: all 3-unit and above courses, and C102+C102L, 110+110L, 120+120L
- Political Science: C131A
- Psychology: 110, C112, C113, 114, C116, 117, 119, C120, 121, 122, C123, C124, 125, C126, C127, C129, 130, 131, 133, 140, 141, 143, 164
- Public Health: C102, 112, 126, C129, 140, 150A, 150B, 162A, C170B, C172
- Public Policy: 101, 103, C103, C142, 184
- Rhetoric: 107, 170
- School of Information: 114, 152
- Sociology 105, 106, 107A, 107B
- UGBA: 101A, 101B, 102A, 102B, 103*, 106, 113, 118, 119, 120A, 120B, 122, 126, 131, 132, 133, 136F, 141, 160, 161, 162, 165, 180

## REQUESTING APPROVAL OF COURSES NOT ON THIS LIST

To request approval of a course not currently on this list, see the Undergraduate Faculty Advisor, Prof. Ani Adhikari during her drop-in hours. Bring the following information:

- Course name
- College Name
- Units and indicate if they are semester or quarter system units
- Course description, including description of prerequisites
- Syllabus and textbook information (if available)
- Any other supporting documentation (if available), such as sample assignments or exams

* Note: Beginning Fall 2011, Applied Clusters that include both Econ 136 and UGBA 103 are no longer acceptable. The Economics Department determined there is enough overlap to prevent students from receiving credit for Econ 136 if a student has already taken UGBA 103. You may use one but not the other. If your cluster was approved prior to Fall 2011 and it included both Econ 136 and UGBA 103, your approval will be honored.