# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>1</td>
</tr>
<tr>
<td>Advisors</td>
<td>1</td>
</tr>
<tr>
<td>Faculty</td>
<td>1</td>
</tr>
<tr>
<td>Requirements</td>
<td>2</td>
</tr>
<tr>
<td>M.S. Degree</td>
<td>2</td>
</tr>
<tr>
<td>Ph.D. Degree</td>
<td>2</td>
</tr>
<tr>
<td>Ph.D. Qualifying Exam</td>
<td>2</td>
</tr>
<tr>
<td>Ph.D. Preliminary Exam</td>
<td>3</td>
</tr>
<tr>
<td>Dissertation Proposal</td>
<td>3</td>
</tr>
<tr>
<td>Public Seminar</td>
<td>4</td>
</tr>
<tr>
<td>Evaluation of the Presentation</td>
<td>4</td>
</tr>
<tr>
<td>Pass-Fail Options for First Attempt</td>
<td>4</td>
</tr>
<tr>
<td>Pass-Fail Options for Second Attempt</td>
<td>5</td>
</tr>
<tr>
<td>Timetable for Taking the Preliminary Examination</td>
<td>6</td>
</tr>
<tr>
<td>Final Examinations for M.S. and Ph.D. Degrees</td>
<td>6</td>
</tr>
<tr>
<td>Expectations</td>
<td>6</td>
</tr>
<tr>
<td>Classes Offered</td>
<td>7</td>
</tr>
<tr>
<td>Financial Support</td>
<td>8</td>
</tr>
<tr>
<td>Academic Progress and Denial of Financial Support</td>
<td>9</td>
</tr>
<tr>
<td>Stat Lab</td>
<td>10</td>
</tr>
<tr>
<td>Stat Lab</td>
<td>10</td>
</tr>
<tr>
<td>Reports, Theses, Dissertations, Resumes</td>
<td>11</td>
</tr>
<tr>
<td>Consulting</td>
<td>11</td>
</tr>
<tr>
<td>Guidelines for Teaching Assistants</td>
<td>11</td>
</tr>
<tr>
<td>Characteristics of General Education Courses</td>
<td>11</td>
</tr>
<tr>
<td>Syllabus</td>
<td>11</td>
</tr>
<tr>
<td>Policy Sheet</td>
<td>11</td>
</tr>
<tr>
<td>Textbooks and Other Instructional Materials</td>
<td>12</td>
</tr>
<tr>
<td>Contact Information</td>
<td>12</td>
</tr>
<tr>
<td>Evaluating Students</td>
<td>12</td>
</tr>
<tr>
<td>Suggestions for a Grading Plan</td>
<td>12</td>
</tr>
</tbody>
</table>
Make-up Exams or Late Homework ................................................................. 13
Exam Format .................................................................................................. 14
University’s Undergraduate Honor Code ....................................................... 14
Exam Questions .............................................................................................. 14
Dealing with Students ................................................................................... 15
GTA Meetings ................................................................................................. 15
Evaluations ..................................................................................................... 15
Office Hours/Help Session ............................................................................... 15
Professional Conduct .................................................................................... 16
Questions ........................................................................................................ 16
Drop/Add Enrollment Policy .......................................................................... 16

Office Procedures .......................................................................................... 17
Copy Machine Use .......................................................................................... 17
Arts and Sciences Copy Center - Eisenhower Hall ........................................... 17
Office Equipment ............................................................................................ 17
Office Supplies ............................................................................................... 17
Notebooks, Data Projector and Overhead Projectors ....................................... 17
Personal Mail .................................................................................................. 18
Departmental Library ...................................................................................... 18
Letters of Recommendation .......................................................................... 18
Questions about the Department, Campus or University Procedures .......... 18
Room Reservations ....................................................................................... 18
Scheduling Seminars ..................................................................................... 18
Keys ................................................................................................................ 19
Departmental Refrigerator, Microwave and Coffee Club ............................... 19
Welcome

Welcome to the Statistics Department! This handbook provides information to help you become familiar with our procedures and requirements. If you have questions, feel free to ask.

Advisors

New students will be assigned a provisional advisor during the orientation period prior to the first week of classes. The student will consult with his or her advisor to prepare a schedule of classes for the first semester and outline a general program for the first year. Within three semesters of study for M.S. students, (no later than the beginning of the third semester is strongly advisable) or within two semesters of passing the qualifying exam for Ph.D. students, the student should select a major professor (the semester in which the candidate passes the qualifying exam is counted as semester number one, and summers do not count toward the time limit). The major professor will serve as the student's permanent advisor, will help the student prepare a program of study, and will direct the student's research work.

After the major professor has been selected, an advisory committee will be formed in consultation with the major professor. The committee will be responsible for monitoring the progress of the student.

Faculty

Our faculty has a broad range of interests in statistical theory and applications. The regular faculty, their degree-granting institutions and some of their research specialties are listed below.

- Nora Bello (Michigan State): Linear Mixed Models, Hierarchical Bayesian Models, Design of Experiments, Statistical Consulting
- Kun Chen (Iowa): Dimension Reduction, Multivariate Analysis, Semi-parametric Models, Bioinformatics, Bayesian Statistics
- Juan Du (Michigan State): Asymptotic and Computational Methods in Spatial Statistics
- Suzanne Dubnicka (Penn State): Nonparametric Statistics, Bayesian Statistics
- Gary Gadbury (Colorado State): High Dimensional Data Analysis, Causal Inference, Biostatistics
- Abigail Jager (University of Chicago): Causal Inference, Likelihood Methods
- Leigh Murray (Virginia Tech): Linear Models, Design of Experiments, Statistical Consulting
- James Neill (Kansas State), Department Head: Linear and Nonlinear Models, Model Adequacy Tests
- Paul Nelson (Rutgers): Survival Analysis, Stochastic Processes, Estimating Functions
- Perla Reyes (Wisconsin): Spatial-temporal Statistics, Bayesian Nonparametric Methods, Model Selection, Complex Networks
- Weixing Song (Michigan State): Nonparametric Smoothing, Errors-in-Variables Models, Categorized Data Analysis
- Christopher Vahl (Kansas State): Design and Analysis of Experiments, Mixed Models, Sampling of Finite Populations, Statistical Consulting
- Haiyan Wang (Penn State): Nonparametrics, Longitudinal Data Analysis, Analysis of Designs with Large Numbers of Levels, Linear Models
- Weixin Yao (Pennsylvania State): Mixture Models, Longitudinal Data, Nonparametric Smoothing, Robust Regression

Requirements

M.S. Degree
Two master’s degree options are available: the master’s report and the non-report.

- For the master’s report option, the student must take 30 hours of course work and write a report for 2 additional hours of credit.
- For the non-report option, the student must take 36 hours of course work and pass a comprehensive exam approved by the supervisory committee.

The master’s report option is strongly recommended for all students, especially those for whom the master’s degree will be the terminal degree.

In either case, the course work must include STAT 713, STAT 770, STAT 771, STAT 860, STAT 720, and at least one credit of STAT 945.

Master’s students wishing to continue for the Ph.D. must apply for admission to that program. Students should meet with the Department Head regarding available funding.

Ph.D. Degree
Students are required to have 90 hours of course credits. Up to thirty hours from a Master’s program may be applied toward the 90 hours and 30 of the hours must be research. The remaining 30 hours are to be selected primarily from the courses offered by the Department.

All Doctoral students are required to include STAT 842, 843, 860, 861, and at least 8 credit hours of 900 level Statistics classes (selected from 903, 904, 905, 907, 940, 941 and 950) in their program of study. In addition, all are expected to have a background in mathematics at least at the level of advanced calculus. Students who do not have this background upon entering the program may include Advanced Calculus I and II in their program of study.

Ph.D. Qualifying Exam
Students interested in pursuing the Ph.D. are required to first pass a departmental Qualifying Exam. Subsequently, students pursuing the Ph.D. must pass the doctoral preliminary examination (see below) in order to be approved for degree candidacy by the Graduate School.
The Qualifying Exam consists of material from courses covering applied statistics, mathematical statistics and linear models. The exam will be given once a year, in January. Students may take the exam as early as desired. However, a student with an M.S. in Statistics who starts Ph.D. course work in the department during the fall semester must take the exam no later than after their first three semesters in the program. A student with an M.S. in Statistics who starts Ph.D. course work in the department during the spring semester must take the exam no later than the January following their first four semesters in the program. Students admitted to pursue the Ph.D. but without the M.S. in Statistics should plan to take the exam no later than the January following their first five semesters in the program. Waivers of this requirement may be granted but only in exceptional cases. Further, students who fail to take the exam on schedule may lose funding.

As noted above, the exam will consist of three parts: mathematical statistics, linear models and applied statistics. Students taking the Ph.D. qualifier will be required to pass two of the three subject area exams. Students may take all three exams. The courses listed below, as based on the department’s offerings as of fall 2012, are only intended to indicate the scope of the material covered. They are not required as prerequisite to taking the exam. Mathematical Statistics: Stat 842, 843; Linear Models: Stat 860, 861; Applied Statistics: Stat 720, 870. Students who fail the exam may be granted a second chance when the exam is given again, during the following January. However, a second opportunity is not automatic and approval of such is based upon recommendation by the faculty.

Note that the preceding qualifying exam format applies to students admitted to the Ph.D. program for fall 2012, and thus will take effect January 2014. In order to transition previously enrolled students eligible to sit for the exam January 2013, the current system will be kept in place. A reminder notice of the structure and coverage for the current system will be published early during fall 2012.

Preliminary Exam
Dissertation Proposal
The doctoral preliminary examination will consist of a substantial thesis proposal. It will be judged on how well the candidate has located a problem, searched the literature, read relevant material, and sufficiently refined the problem so that the candidate has a reasonable chance of writing an acceptable dissertation. The proposal will be presented to the candidate's supervisory committee in written form, and to the department and the supervisory committee in a public seminar. A candidate may take the preliminary examination at most twice. If the candidate fails the preliminary examination a second time, he or she will be dismissed from the Statistics graduate program.

The candidate must provide a complete written copy of the proposal to each member of the candidate's supervisory committee two full weeks before the anticipated date of the public presentation. At the same time, the candidate must provide a short (less than one page) summary or abstract to all faculty in the Department of Statistics, and arrange for a seminar.
The candidate will provide faculty not on the supervisory committee a copy of the complete proposal at their request.

Public Seminar
The candidate will present the public seminar at a date mutually agreed upon by the candidate, the candidate’s supervisory committee, and the department head. The candidate must notify the Graduate School one month before the scheduled date. At the conclusion of the presentation, there will be a time for general questions from the audience. After the general questioning period, the general audience will be dismissed, and a second questioning period will begin with the candidate's supervisory committee and other interested Department of Statistics faculty members in attendance. The candidate should be prepared to answer questions that address specific points in the proposal, courses on the candidate's program of study, and general statistical knowledge. See page 19 for scheduling a seminar.

Evaluation of the Presentation
At the conclusion of the second questioning period, the candidate will be asked to leave the room, and any Department of Statistics faculty members still in attendance may stay to advise the candidate’s supervisory committee as to the candidate’s ability to pursue Ph.D. work. After providing advice, those who are not members of the candidate's supervisory committee will be excused. The candidate's supervisory committee will then discuss and vote on the candidate's performance, with a three fourths majority of favorable votes needed to pass the preliminary exam.

Pass-Fail Options for First Attempt
The supervisory committee may decide to do one of the following after the first preliminary examination.

1. **Unconditional Pass.** If at least three fourths of the members of the supervisory committee vote to pass the candidate, the ballot will be signed indicating pass and returned to the Graduate School.

2. **Conditional Pass.** With the approval of at least three fourths of the supervisory committee, the candidate may be granted a conditional pass. A conditional pass is granted when the written proposal, oral presentation, or subsequent questioning show deficiencies that are not deemed severe enough for failure but are of sufficient concern to deny an unconditional pass. In this event, the supervisory committee will specify what is required of the candidate to remove the deficiencies and the time period allotted to the candidate to remove the deficiencies. The ballot will be held and not returned to the Graduate School until the candidate has removed the deficiencies or until the end of the time period allotted for removal of the deficiencies, whichever comes first. The candidate may be asked to revise the proposal, study additional material, take a written exam, make an oral presentation or any combination of the above in order to clear up the deficiencies. If another oral is required, it will be presented to the supervisory committee and other interested Statistics faculty. Additional oral presentations required by the supervisory committee will not be public seminars. When the deficiencies have been removed or when the allotted time for removal of the deficiencies has expired,
whichever comes first, the candidate's supervisory committee will meet to vote either to pass or fail the candidate. The candidate will be judged to have passed the preliminary examination if at least three-fourths of the members of the supervisory committee vote to pass the candidate. Otherwise the candidate will be judged to have failed the first attempt at the preliminary examination. At this point, the ballot will be signed indicating either pass or fail and returned to the Graduate School.

3. **Failure.** A candidate who fails to receive an unconditional pass and is not granted a conditional pass will be judged to have failed the first attempt at the preliminary examination. The ballot will be signed indicating failure and returned to the Graduate School.

**Pass-Fail Options for Second Attempt**

In case of failure of the first preliminary examination, the supervisory committee may approve a second examination with no more than one dissenting vote. A second examination can be taken no sooner than three months following the initial failure. The candidate's supervisory committee will specify the format of the second attempt. If the first proposal is inadequate, the candidate may be asked to revise and present the revision to the supervisory committee and other interested Statistics faculty. If the candidate shows lack of knowledge in some key area related to the proposed research, the candidate may be asked to study the material and take a written and/or oral examination on the deficient area. If the supervisory committee decides that the topic will not likely lead to a dissertation in a reasonable amount of time, a new problem may be provided and a new proposal written with an oral presentation to the supervisory committee and other interested Statistics faculty. Additional oral presentations required by the supervisory committee will not be public seminars.

The supervisory committee may decide to do one of the following after the second preliminary examination.

1. **Unconditional Pass.** If at least three-fourths of the members of the supervisory committee vote to pass the candidate, the ballot will be signed indicating pass and returned to the Graduate School.

2. **Conditional Pass.** With the approval of at least three-fourths of the supervisory committee, the candidate may be granted a conditional pass. A conditional pass is granted when the candidate's second attempt shows deficiencies that are not deemed severe enough for failure but are of sufficient concern to deny an unconditional pass. In this event, the supervisory committee will specify what is required of the candidate to remove the deficiencies and the time period allotted to the candidate to remove the deficiencies. The ballot will be held and not returned to the Graduate School until the candidate has removed the deficiencies or until the end of the time period allotted for removal of the deficiencies, whichever comes first. When the deficiencies have been removed or when the allotted time for removal of the deficiencies has expired, whichever comes first, the candidate's supervisory committee will meet to vote either to pass or fail the candidate. The candidate will be judged to have passed the preliminary examination if at least three-fourths of the members of the supervisory committee vote
to pass the candidate. Otherwise the candidate will be judged to have failed the second attempt at the preliminary examination. At this point, the ballot will be signed indicating either pass or fail and returned to the Graduate School. Failure of the second attempt will result in the candidate being dropped from the Ph.D. program in Statistics.

3. **Failure.** A candidate who fails to receive an unconditional pass and is not granted a conditional pass will be judged to have failed the second attempt at the preliminary examination. The ballot will be signed indicating failure and returned to the Graduate School. Failure of the second attempt will result in the candidate being dropped from the Ph.D. program in Statistics.

Timetable for Taking the Preliminary Examination

The preliminary examination must be taken within five semesters of passing the departmental qualifying examination. The semester in which the candidate passes the qualifying exam is counted as semester number one, and summers do not count toward the time limit. After passing the qualifying examination, the candidate should start preparing for the preliminary examination as soon as the supervisory committee determines that the candidate is ready.

Final Examinations for M.S. and Ph.D. Degrees

The responsibilities regarding scheduling and announcement of the final examination for M.S. and Ph.D. students are available in the Graduate Handbook as published by the Graduate School ([www.k-state.edu/grad/graduate_handbook](http://www.k-state.edu/grad/graduate_handbook)).

**Expectations**

A thorough understanding of statistical theory and experience in applying statistical methods are keys to any statistician’s success. Students are expected to strive for good grades in all courses. All students must take the required courses indicated previously and file a program of study in concordance with the guidelines given in the Graduate Handbook as published by the Graduate School. In particular, the program of study should be filed once the major professor has been selected. More generally, graduate students should become familiar with the policies and degree requirements in the Graduate Handbook.

Permission to audit a class must be obtained from the instructor at the beginning of the semester before classes start. This policy holds for MS and Ph.D. level classes.

The Department does a tremendous amount of consulting work both for researchers and students on campus and for individuals and agencies off campus. At some point in the student's stay at Kansas State, the student should get involved in one or more consulting projects. Projects vary in length of time and sophistication of methods needed to complete them. Students should contact the department head to find out what is available. Up to 2 hours credit may be earned for consulting by registering for STAT 945. Registration for STAT 945 requires the approval of the department head. When a student commits to a project, it is
expected that the work will be carried to completion. A good job on a consulting project will be a satisfying and valuable experience.

The Department has an excellent reputation for turning out students who know how to solve real-world problems. The consulting experience is a critical component in that process. Just one word of caution - students should budget their time so that both the consulting project and other departmental duties get done, including coursework and teaching. Consulting experience is not a substitute for good grades. Rather, it is a way to put into practice what one is learning in the classroom.

The department hosts many seminars every semester. Our speakers include people from across the country as well as our own faculty and graduate students. Seminars provide the opportunity to learn about current research in statistics, interesting consulting experiences and applications of statistics, new teaching ideas, job opportunities and career possibilities. Graduate students are expected to attend the weekly seminars. In addition, opportunities to participate in journal club activities and graduate student seminar presentations will be forthcoming.

We expect students to make adequate progress in the program. In most cases, two years is adequate to complete the M.S. degree, and four years beyond the M.S. degree is adequate to complete the Ph.D. degree. To fulfill the obligation that students pursue studies full-time, graduate assistants must be enrolled for a minimum of 6 hours of credit during fall and spring terms. Students not on graduate assistant support must be enrolled for a minimum of 9 hours of credit. The Graduate School does not require that graduate students be enrolled during the summer. Student progress will be reviewed by the department’s Student Progress Committee each year. Students who are being supported by the department must make adequate progress to be considered for continuing support.

Classes Offered

The pattern below repeats every two years starting with even numbered years
Parentheses denote courses that are optionally scheduled.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>FALL Even</th>
<th>SPRING Odd</th>
<th>SUMMER Odd</th>
<th>FALL Odd</th>
<th>SPRING Even</th>
<th>SUMMER Even</th>
</tr>
</thead>
<tbody>
<tr>
<td>702</td>
<td>702</td>
<td>702</td>
<td>702</td>
<td>702</td>
<td>702</td>
<td>702</td>
</tr>
<tr>
<td>703</td>
<td>703</td>
<td>703</td>
<td>703</td>
<td>703</td>
<td>703</td>
<td>703</td>
</tr>
<tr>
<td>704</td>
<td>704</td>
<td>704</td>
<td>704</td>
<td>704</td>
<td>704</td>
<td>704</td>
</tr>
<tr>
<td>705</td>
<td>705</td>
<td>705</td>
<td>705</td>
<td>705</td>
<td>705</td>
<td>705</td>
</tr>
<tr>
<td>706</td>
<td>706</td>
<td></td>
<td></td>
<td></td>
<td>706</td>
<td></td>
</tr>
<tr>
<td>710</td>
<td></td>
<td>710</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>713</td>
<td></td>
<td>713</td>
<td></td>
<td></td>
<td>713</td>
<td></td>
</tr>
<tr>
<td>716</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>716</td>
<td></td>
</tr>
<tr>
<td>717</td>
<td></td>
<td></td>
<td></td>
<td>717</td>
<td>717</td>
<td></td>
</tr>
<tr>
<td>720</td>
<td>720</td>
<td>720</td>
<td></td>
<td>720</td>
<td>720</td>
<td>720</td>
</tr>
<tr>
<td>COURSE</td>
<td>FALL Even</td>
<td>SPRING Odd</td>
<td>SUMMER Odd</td>
<td>FALL Odd</td>
<td>SPRING Even</td>
<td>SUMMER Even</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>722</td>
<td>722</td>
<td></td>
<td></td>
<td>722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>725</td>
<td>725</td>
<td></td>
<td></td>
<td>725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>726</td>
<td>726</td>
<td>726</td>
<td></td>
<td>726</td>
<td></td>
<td></td>
</tr>
<tr>
<td>730</td>
<td>730</td>
<td></td>
<td></td>
<td>730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>736</td>
<td>736</td>
<td></td>
<td></td>
<td>736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>745</td>
<td></td>
<td></td>
<td></td>
<td>745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>770/771</td>
<td>770</td>
<td>771</td>
<td></td>
<td>770</td>
<td>771</td>
<td></td>
</tr>
<tr>
<td>(799)</td>
<td>(799)</td>
<td>(799)</td>
<td>(799)</td>
<td>(799)</td>
<td>(799)</td>
<td>(799)</td>
</tr>
<tr>
<td>818</td>
<td>818</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>825</td>
<td></td>
<td>825</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>842/843</td>
<td>842</td>
<td>843</td>
<td></td>
<td>842</td>
<td>843</td>
<td></td>
</tr>
<tr>
<td>850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>850</td>
<td></td>
</tr>
<tr>
<td>860/861</td>
<td>860</td>
<td>861</td>
<td></td>
<td>860</td>
<td>861</td>
<td></td>
</tr>
<tr>
<td>870</td>
<td>870</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>880</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>880</td>
<td></td>
</tr>
<tr>
<td>(899)</td>
<td>(899)</td>
<td>(899)</td>
<td>(899)</td>
<td>(899)</td>
<td>(899)</td>
<td>(899)</td>
</tr>
<tr>
<td>903</td>
<td></td>
<td></td>
<td></td>
<td>903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>904</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>904</td>
<td></td>
</tr>
<tr>
<td>905</td>
<td></td>
<td></td>
<td></td>
<td>905</td>
<td></td>
<td></td>
</tr>
<tr>
<td>907</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>907</td>
<td></td>
</tr>
<tr>
<td>940</td>
<td></td>
<td></td>
<td></td>
<td>940</td>
<td></td>
<td></td>
</tr>
<tr>
<td>941</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>941</td>
</tr>
<tr>
<td>945</td>
<td></td>
<td></td>
<td></td>
<td>945</td>
<td>945</td>
<td></td>
</tr>
<tr>
<td>950</td>
<td>(950)</td>
<td>(950)</td>
<td>(950)</td>
<td>(950)</td>
<td>(950)</td>
<td>(950)</td>
</tr>
<tr>
<td>(999)</td>
<td>(999)</td>
<td>(999)</td>
<td>(999)</td>
<td>(999)</td>
<td>(999)</td>
<td>(999)</td>
</tr>
</tbody>
</table>

Financial Support

The Department offers two types of financial support: the teaching assistantship and the research assistantship.

The great majority of the positions are teaching assistantships. Our teaching assistants will generally have complete responsibility for an introductory class or leadership responsibility for a studio classroom. Therefore, it is important for us to have people who are comfortable in front of a classroom. Students whose native language is not English are required to pass the SPEAK exam or have a 22 or higher score on the speaking portion of the IBT to be considered for a teaching assistantship. This is a University requirement which cannot be waived by the Department.

We have a small number of full or part-time research assistantships. The number varies from semester to semester. The student who is appointed to a research assistantship will be
involved in one or more major consulting or research projects. We usually choose the more experienced students for this type of appointment. Demonstrated ability and willingness to work hard are the two most important criteria for selecting research assistants.

Normal appointments for both research and teaching assistantships are 5/10 time which presumes 20 hours of effort per week. Students with research and/or teaching assistantships should not plan on working at other jobs simultaneously, and should do this only after clearing it with the department head or director of graduate studies.

We try to make summer support available to those who have served as teaching assistants or research assistants during the academic year. Some appointments require classroom teaching and others require assisting faculty members with their teaching and research. We have also been able to arrange a few internships with various industries. Unfortunately, summer support cannot be guaranteed nor can an amount be guaranteed.

The Department also has a few scholarships available for current students for the upcoming semesters. Announcements for applications and deadlines are sent out early in the spring semester. Selections are made by a committee of faculty members. Decisions are based on grades and activity within the Department and/or University, such as assisting at the annual Conference on Applied Statistics, working with the Stat Club or volunteer work in the community. Winners are notified by letter within a couple of weeks after the deadline.

**Academic Progress and Denial of Financial Support**

The departmental Graduate Student Progress committee has developed a policy to help guide students through the Graduate Program in a timely and beneficial manner. The policy has been discussed and approved by the faculty. The policy items are listed below.

These items are consistent with the Graduate Handbook which was developed by the Graduate Faculty at K-State ([www.k-state.edu/grad/graduate_handbook](http://www.k-state.edu/grad/graduate_handbook)). All graduate students at K-State are subject to the policies therein. In particular, note Part G in Chapters 2 and 3.

As indicated in the current Statistics Department Handbook, in most cases, two years is considered adequate to complete the M.S. degree and four years beyond the M.S. degree is adequate to complete the Ph.D. degree.

1. A student who is on academic probation for more than one semester (consecutively or not) will be denied financial support from the department.

2. A M.S. student must select a major professor within three semesters (excluding the summer) of study. Failure to do so will result in loss of financial support.
3. A Ph.D. student must select a major professor and form a committee within two semesters (excluding the summer) of passing the qualifying exam. Failure to do so will result in loss of financial support.

4. A Ph.D. student must take the preliminary examination within five semesters (excluding summers) of passing the qualifying exam. Failure to do so will result in the loss of financial support.

5. The Graduate Student Progress committee will make a list of students every semester who it determines are not making satisfactory progress towards completion of a degree. Note that this includes students who are not on academic probation. It also includes students who have completed research for a degree and choose not to defend. Financial support for such students will be terminated at the end of the semester. In addition, students who fail to make satisfactory progress as agreed upon by the major professor and/or supervisory committee will not only lose departmental support but will be recommended for dismissal from the Graduate School. Finally, at the discretion of the major professor and/or supervisory committee, if sufficient progress is not being made on a degree research topic then the student should plan to relinquish the research topic for degree purposes.

6. A student may appeal a denial of financial support to the Graduate Student Progress committee. The committee will make a recommendation to the department regarding the merits of the appeal.

Stat Lab

Stat Lab
The Stat Lab (room 10) is for the use of Statistics majors (graduates and undergraduates), faculty, and consulting clients. There are PCs and a laser printer for public use. If you are new at using this equipment, get help. This is your lab. The fewer dollars we have to spend on repairs, the more dollars we have available for other things.

If you have problems with your document not printing, please do not repeatedly hit the Print button. If you inadvertently hit it, remove all jobs from the print queue. Check to see if all jobs have been deleted before reporting that the printer is not working. Do not use the printer to make copies.

It is expected that the users of the Stat Lab will keep it clean. The doors to the Stat Lab lock automatically. Please be sure the door is closed when you leave the lab, day or night. Please keep the AC on and the door closed during the hot summer.

There is also a public computing lab in Room 1 that is open 24 hours a day. It has a wide variety of software available such as Excel, MS Word, Minitab, etc. It is available for your use, but is also has many users who are not statistics students.
Reports, Theses, Dissertations, Resumes
These documents should be entered using MS Word, or Latex. Do not convert to .pdf for printing as this causes problems with the printer. The student is required to give printed copies of his/her dissertation or report to the major professor and all committee members at his/her own expense. Do not print multiple copies on the printer in room 10. Print one original, and then take that original to a copy center. This is not a departmental expense.

Consulting
The Department provides consulting services to the university through K-State Research and Extension. You may refer prospective clients to one of the consulting faculty: Drs. Bello, Murray, and Vahl, all of whom have appointments for which a portion of the duties are assigned as consulting. You may at times have the opportunity to do consulting work for student or faculty clients. We urge you to visit with one of the consulting faculty before undertaking a project. This will help insure that your consulting advice is correct.

Guidelines for Teaching Assistants

Characteristics of General Education Courses
Our introductory courses have been approved for General Education. The main goals of General Education are to facilitate the idea of active learning in the classroom, the experiential context, and the opportunity to make connections. We have revised our courses with the University Guidelines for General Education in mind. In addition to the typical lecture-textbook format, we will add to the student’s experience by including ideas and activities that draw on the student’s personal background and experience. The coordinator will work with you each week to insure that General Education principles are included in your course. The inclusion of these principles is required by all instructors. All courses must do at least two writing assignments, at least two in-class projects, and at least two computer projects per semester.

Syllabus
Our syllabi for Stat 325, 340, 350 and 351 were designed in accordance with the general education principles. Copies of the 340, 350 and 351 syllabus may be obtained from office staff. Office staff can either make hard copies or send an electronic version to your email address. Please follow the syllabus as closely as you can. If you would like to modify the syllabus or are having problems following the syllabus, see the course coordinator.

Policy Sheet
You should prepare a sheet of class policies to hand out to students (along with the syllabus) on the first day of class. Your class policy sheet should include the following:

- A list of required and/or recommended materials that the student will need for your class.
- How to contact you.
- The grading procedure that will be used to evaluate student grades in this class.
- Policy for missed exams or late homework.
- Copy of University’s Undergraduate Honor Code

Your policy sheet is important. Be sure to carefully consider the contents. This sheet will help to establish clear expectations of the students and provide you with protection in case of a student conflict with regard to class procedures. Make sure that your policies are something you can stick with during the semester. Students tend to get frustrated when the requirements for the course change. Below are more complete descriptions of the things to include in your policy sheet.

Textbooks and Other Instructional Materials
Students will need to purchase their own textbook. Additional materials that you may want them to purchase include our own easy-to-use statistics tables, the departmental instruction booklet for using Microsoft Excel and a calculator. Students may purchase the statistics tables and/or instructions for using Microsoft Excel or Minitab at the Arts & Science Copy Center in Eisenhower Hall, room 11.

Contact Information
Students need to know how to get in touch with you outside of class. Be sure to include your e-mail address on your policy sheet. E-mail is an easy way to communicate with your students once you get in the habit of checking it at least once daily. If you want, you can include your office phone number; however, remind students that if they cannot reach you by phone to send you an e-mail message. You must also include your office hours and help lab time. If your schedule is not set, simply put “To Be Announced” and then put the times on the board when you know your schedule.

Evaluating Students
Students are to be given one-hour exams according to the syllabus, a comprehensive final which must be taken by all students, at least two in-class activities, at least two writing assignments, and at least two computer assignments. All other homework assignments and quizzes are to be given at your discretion.

Students are very concerned about grades. Let the students know your grading scale at the beginning of the semester and stick to it. They want to be assured that they will be evaluated fairly.

Suggestions for a Grading Plan
If you are looking for a grading plan, here is one that would be acceptable.

Grades will be based on the following:
3 one-hour exams (according to the syllabus), 15% per exam.

A comprehensive final worth 25%. The final is required of everybody.
Homework including writing, computer, in-class activities, and quizzes: 30%. {Note: Attendance may also be considered as factor in the grade, at the instructor’s discretion.}

The low hour-exam score may be replaced by the percentage score obtained on the final if it will improve the student’s grade.

Grades will be assigned according to the following percentages.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90% to 100%</td>
</tr>
<tr>
<td>B</td>
<td>80% to 89%</td>
</tr>
<tr>
<td>C</td>
<td>70% to 79%</td>
</tr>
<tr>
<td>D</td>
<td>60% to 69%</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
</tr>
</tbody>
</table>

The ranges for determining letter grades are up to you. The ranges above are just suggestions. Your scale will depend on how strict or how generous you are with partial credit. While there are no quotas on the number of A’s or F’s that can be given in your class, most classes are neither exceptionally bad nor exceptionally good in terms of the capabilities of the students. Keep that in mind when giving partial credit and assigning grades.

Regardless of the grading plan that you use, it is important to allow students some way to redeem themselves if they obtain just one low hour exam or one low quiz score. Replacing a low grade with the final exam score and dropping a low quiz/homework score are ideas that have worked for others.

Make-up Exams or Late Homework
When establishing your policy for make-up exams or late homework consider the motto “tough but fair.” You want a policy tough enough that students will work hard to meet your deadlines but fair so that in a case where a student has a legitimate problem they can redeem themselves.

One policy for late homework that has worked well for others is: Late homework will be accepted (with a 10% penalty per day) only up to the time that the assignment has been graded and returned. Note this policy lets the students know that they can turn in late homework but there is a time limit and it helps you because grading late homework can be very time consuming.

Whether or not to allow make-up exams is a difficult thing to decide. Set the policy you feel most comfortable with. One possibility would be to let the missed exam be the one that is replaced by the final score. This will keep you from having to prepare a separate make-up exam. If you decide to allow make-up exams, you may want to include a clause in your statement such as: All make-up exams must be arranged in advance when possible. Verifiable documentation (e.g. note from a doctor) is required to make-up an exam.
Exam Format
You may want to include a brief statement about the format of your exams. For instance: 
*Exams will be closed-book, but students may bring one 8½" x 11" sheet of paper with formulas to the exam. Statistical tables will be provided as needed. Calculators may be used for computing numerical values.* However, if you are not sure what your policy will be about formula sheets, closed-book, etc. it is better to leave it out for the first semester you teach.

University’s Undergraduate Honor Code
Remind students that you can fail them if they cheat. You may want to include the KSU Honor Pledge: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." The pledge and other information about the Honor System are available at the web site: [www.ksu.edu/honor](http://www.ksu.edu/honor).

Exam Questions
Stat 340 and 351 instructors must write their own exams and determine the grading scale. The department has an exam pool to provide model questions. GTAs in their first year at KSU are required to submit a copy of each exam to the course supervisor for review. The exams must be submitted at least three days prior to giving the exam. This 3-day period is necessary in order to take care of any revisions/final editing of your exams.

Exam questions should be like the "average" homework problems with the addition of some general education questions. General education questions emphasize statistical concepts; these questions may be essays about statistical concepts or questions about projects and activities from class. The department has developed an exam pool that has model questions for both typical homework and non-traditional questions. Exams should represent the material covered in class.

Make sure your exams are readable and that questions are clearly and concisely stated. Always try to include the point values of the problems for the students’ information. Word processors are available for your use. Most experienced students will be able to help you get started.

Take the exam yourself before giving it to the students. If it takes you more than 15 minutes to work it, it is probably too long. Try out your exam questions on your colleagues.

Please post the date, time and location of the exam you are giving on your door. If you leave the exam with one of the staff, please let them know who will be taking the exam, when they will be coming to pick it up and how long they have to take the exam. If someone from Disabled Student Services is picking up an exam for one of your students, make sure you have left it in the main office in a campus envelope (you can get the campus envelope from a staff member) with the student’s name, instructor’s name and class/section.

Be sure that there is adequate information at the top of your exam. In addition to space for the student to insert his/her name, you should always include the course number (e.g., statistics 350), your name, the date (or at least the semester of the course; e.g.: Fall 2012 or October 2, 2012), and some indication of which exam this is (e.g., Exam 1).
Dealing with Students
Establishing clear procedures at the beginning of the class will set the right tone for the conduct of your class. Learning students' names and calling on them will help establish rapport. Practice the Golden Teaching Rule. Treat your students as you would be treated by your Professors. You may wish to ask students to prepare a profile sheet for you which would include such information as major, previous math courses, hometown, age, special comments, etc.

Fortunately, you will seldom have discipline problems. The thing that upsets students the most is the feeling that they have been treated unfairly. See Dr. Jager or Dr. Neill if you run into a situation you have trouble handling.

Students who do poorly on the first or second exams generally will do poorly in the course. Talk to these students and find out what's going on. In most cases, it is best for such students to drop the course and try it again at some other time. Students will sometimes feel a sense of "disgrace" for doing poorly and will wish to continue in the course to "prove" themselves. Generally this strategy leads only to frustration and disappointment. It is usually better for the student to protect his or her grade point average by dropping.

Unfortunately, cheating sometimes occurs on exams. Some instructors will prepare two different, but similar, exams so that adjacent students will not have the same questions. Keeping students "spread-out" in the classroom may also help. Remind students that you can fail them if they cheat. If you have a problem with students cheating, check with Dr. Neill or other faculty to obtain advice on how to handle the situation. The Undergraduate Honor System (web site: www.ksu.edu/honor) is another source of information when dealing with academic dishonesty.

GTA Meetings
We encourage our GTAs to work together. Exchanging ideas will help improve the quality of our instruction. Attendance at the weekly GTA meetings is required. To be effective, the content of our courses must be very similar across sections. Working together will help achieve the consistency needed.

Evaluations
You are required to give your students the opportunity to evaluate you. Office staff will put evaluation forms in your mailbox the week before finals. The evaluations are primarily used for feedback so the individual instructor can make improvements in his or her teaching. However, the department reviews the evaluations. Additionally, we reserve the right to evaluate any GTA during the semester. This evaluation may include having the students evaluate the instructor and/or having a faculty member visit the classroom and observe the GTA in the performance of his/her duties.
Office Hours/Help Session
Instructors must **post** and **hold** regular office hours, at least two hours per week. At the beginning of each semester, you will receive a schedule to fill out and post on your office door. You should also return a copy to the Department office to keep on file. We also schedule help sessions in Room 4 of Dickens Hall. Undergrad students who need help with homework or statistical computing may come there. All graduate teaching assistants are required to spend at least one hour per week in the Help Session Room. Sign-up for help session times will take place during the first week of classes each semester. The Help Session Room will be open during the days when classes are in session. It will be closed at night, during vacation and during final exam periods. If for some reason you are unable to be in the lab during your scheduled time, you are responsible for finding a replacement.

Professional Conduct
Instructors are to conduct themselves as professionals. While we do not have a dress code, neat attire will help set the right tone for a class. It is important to establish yourself as the leader of the class and not just another one of the students.

The Department expects that instructors will meet their fall and spring classes for the full time (either 50 minutes or 75 minutes) scheduled. Your course coordinator or the department head must be notified any time you are unable to conduct class, attend help sessions, or office hours. They also need to be notified of all arrangements you have made to cover a class and class cancellation.

In the event that you are unable to conduct one of your assigned classes, help sessions, or office hours, you should make an effort to cover the class by making arrangements with another instructor. If this is not possible, you should contact your course coordinator or the department head giving sufficient time for them to make arrangements.

Permission must be obtained from Dr. Jager or Dr. Neill, before canceling any class. Being absent from your assigned class to take personal vacation will not be tolerated.

Questions
If you have questions on the material you are teaching, on classroom procedures, exams, or other matters related to your teaching efforts, see the course coordinator or feel free to call on any faculty member. We are here to help you.

Drop/Add Enrollment Policy
Drop/Add policies have changed dramatically with the installation of the new (iSIS) student information systems beginning in the fall of 2008.

Students now are moved automatically from the top of the wait list to the class roster when vacancies occur. They are sent an email to that effect when this occurs, and the remaining students on the wait list are moved up (order on the wait list is determined by the time the student puts himself/herself on the list). GTA’s will **not** need to deal with this issue, henceforth.
You will still get an occasional student who begs to be admitted to the class. Tell them this
decision is not in your hands. If the student appears to have an “extremely” compelling reason
to be admitted to a full class, send them to the department head to plead the case.

Office Procedures

Below are some guidelines that have been prepared to help you understand our office
procedures.

Copy Machine Use
The copy machine is available for departmental business. It is located in Room 101. If you have
departmental copies to be made, ask the office staff for instructions until you are familiar with
it. More than 10 copies should be sent to the Arts and Sciences Copy Center (See Arts and
Sciences Copy Center below).

Our machine will make transparencies. Ask the office staff to assist you.

Arts & Sciences Copy Center
Heavier loads that pertain to the class you are teaching should be done at the Copy Center in
Eisenhower Hall. To do this, obtain a form from the office staff, fill it out, and place it in the
tray on the front desk. Requests will be taken to the Copy Center at 10:00 a.m. and 3:00 p.m.
You should allow at least 24 work hours, especially during peak-use periods. No personal
copies will be allowed to be charged to the Department. Any violations will prohibit future use
of the Copy Center by the offender.

Office Equipment
We have an electric stapler, paper cutter, 3-hole-punch, scotch tape, masking tape, etc., for
your departmental use. You are welcome to use them, but do not remove them from the
office.

Office Supplies
These are for departmental use only! Please be mindful that the Department is on a limited
budget for office supplies. Do not waste valuable resources by misusing these supplies.

Notebooks, Data Projector and Overhead Projectors
The department has three notebooks, two data projectors and three overhead projectors
available for use on a first come/first served reservation basis. If you would like to reserve
them, there is a sign-out sheet. People who have made reservations will have priority over
walk-ins. If you are teaching in Blummont Hall, you can also reserve an overhead from their
Media Center, which is located in Blumont 16 (phone: 2-5926). You can also contact Arts and
Sciences Copy Center in Eisenhower 11 (phone: 2-6895) to reserve an overhead projector.
When returning the notebooks, please plug them back in so they will be charged for the next person using them. **If you are using the data projector, you must wait until the fan has stopped before turning off the projector or unplugging it.** Failure to follow this procedure can result in the lamp needing to be replaced. These lamps cost over $400 each so proper use is vital!

**Personal Mail**

All personal mail must have a stamp on it and put in the “stamped” slot in the downstairs mailbox! Personal mail delivered to the department should be kept to a minimum due to limited university resources. Packages that arrive will be kept in the main office and you will be notified.

**Departmental Library**

The books in the library are there to be used as references. If you would like to use a book, the sign-out sheet is located in the library. Once you have finished with it, please return to the library and cross out your name. Please do not keep the book more than 2 weeks as others may want to use it.

**Letters of Recommendation**

Letters will be sent out only after you have provided office staff with pre-addressed stamped envelopes. It is your responsibility to get the envelopes to office staff. If you would like for all letters addressed to the same person to be sent in the same envelope, indicate this when you bring the envelopes. If you would like for them to be mailed in separate envelopes, provide the correct amount of self-addressed stamped envelopes.

**Questions about the Department, Campus or University Procedures**

Office staff will do their best to answer any questions and give you any assistance they can. However, be advised that they have numerous other duties that they are also responsible for and the Department does not have the resources available to abuse their time or efforts. Please be considerate of this when making requests of them.

**Room Reservations**

If you would like to reserve a campus classroom for a special purpose (review session for an upcoming exam, etc.) at a time in which you do not have class scheduled, you must make a reservation with the university's facilities department. Pam is available to make room reservations for you. Please provide the following information: your name, date, time (beginning and ending), building/room desired with at least one alternative location, number of people expected to attend and purpose of meeting (e.g., review session for exam).

**Scheduling Seminars**

The department holds several seminars each semester. Dickens 207 has been reserved weekly on Thursday afternoons at 4:00 to schedule seminars. Refreshments, normally supplied by the Stat Club, are served 30 minutes prior to the seminar in D108.
Seminars are sometimes given by our students. The procedure you need to follow is:

I. Coordinate with the seminar chair to select the time and date.
II. Contact Pam to arrange a room if the seminar is not at the usual time and day.
III. Once the room is set, contact office staff at least a week in advance with the information for date, time, location, title and abstract. Office staff will post the announcement on the website, via email, and paper flyers.
IV. Outside speakers need to meet with Pam so that necessary information for reimbursement of travel expenses can be obtained in a timely and convenient manner.

Keys
You are issued keys to an office (if you are a GTA), the outside doors and the Stat Lab (Room 10). You are responsible for these keys. If lost, you will need to pay for the replacements. The cost is $10/key. If you lock yourself out of your office, or accidentally leave your keys at home, the office personnel will be glad to let you into your office.

Departmental Refrigerator, Microwave, Coffee Club
The department has a refrigerator for your convenience in Room 10. You are expected to help keep it clean and remove items that belong to you before they spoil.

There is a microwave available for your use in Room 110 upstairs. It is open during the day and your key to room 10 will open it during the evening or weekend hours. If you have food that spills out, please clean it right away! Paper towels are available.