Math 106: Elements of Statistics
Spring 2017
L09 Pierce Hall
SECTION 4: MWF 2:10 – 3:00pm

Professor: Marie Snipes
Office: 309-C Hayes Hall
Phone: (740) 427-5929
Email: snipesm@kenyon.edu

Office Hours: M 11am-noon, T 2-4pm, Th 1-3pm, and by appointment

Statistics Clinic: Su/T/Th 8-10pm in RBH 311


Software: R-Studio

Content: Math 106 introduces students to statistical reasoning through a variety of hands-on projects and investigations of real-life applications of statistics. Students will learn to use the statistical software package R to solve problems involving large amounts of data.

Topics covered include graphical and descriptive statistical methods, design of experiments, sampling methods, probability, probability distributions, sampling distributions, estimation, and statistical inference. Confidence intervals and hypothesis tests for means and proportions will be studied in the one- and two-sample settings.

Course Web Page:
http://www2.kenyon.edu/Depts/Math/Snipes/Math106/index.html

Grading Policy:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Projects</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance, Participation, and Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>First Midterm</td>
<td>15%</td>
</tr>
<tr>
<td>Second Midterm</td>
<td>15%</td>
</tr>
<tr>
<td>Highest Midterm (of the 2)</td>
<td>5%</td>
</tr>
<tr>
<td>Cumulative Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Exams:
- First Midterm: Friday, Feb. 17 (in class)
- Second Midterm: Friday, Apr. 7 (in class)
- SECTION 2 Final Exam: Monday, May 8 (6:30 – 9:30pm)

(Continued on other side)
**Homework:** Homework will be collected approximately every class. **Homework is due at the beginning of class. Late homework will not be accepted.** Assignments MUST be stapled, legible, and clearly organized with explanations in complete sentences where appropriate. Student collaborators MUST also be listed for each assignment (see Academic Honesty below). The lowest two assignment scores will be dropped.

**Class participation:** Students are expected to attend and actively participate in all classes. Occasional quizzes and some work done in class will also be counted in this portion of the grade.

**Projects:** Two short writing projects will be assigned over the course of the semester. The projects will provide opportunities for students to explain statistical concepts in writing, and to apply classroom knowledge to real-life situations and datasets. The projects will be evaluated for both mathematical content and quality of exposition. More information about the writing projects will be provided later in the semester.

**Academic Honesty:** Please refer to the Academic Honesty and Questions of Plagiarism section of the Course Catalog for general college policies that apply.

For this class, I encourage you to work with other students on outside assignments. However, every piece of written or computer-generated work that you submit must be your own. Further, students who work with or receive help from other students MUST include attributions in their assignments. Finally, on group assignments all group members should contribute equally to the final product—putting a member’s name on a paper written by others constitutes a breach in academic honesty. If you are uncertain about the expectations for academic honesty in this class, please ask for clarification.

**Special Arrangements:** If you have a physical, psychological, or learning disability that may impact your ability to participate fully in this class, please consult the Coordinator of Disability Services, Erin Salva (salvae@kenyon.edu, x5453). All information and documentation of disability is confidential. Please feel free to discuss any concerns with me, but keep in mind that I cannot make any special accommodations without authorization from Ms. Salva.