ANS 597 Quantitative Genetics

Course Syllabus: Spring 2013

TR 9:30-10:45 pm AGIT 2253

**Instructor:** Dr. Aaron Cooper, Assistant Professor in Animal Science
**Office Location:** 247
**Office Phone:** 886-5676
**Office Fax:** 886-5990
**University Email Address:** Aaron.Cooper@tamuc.edu

### COURSE INFORMATION

**Materials – Textbook:** A particular textbook is not required for this course. However, references will be made through several sources. Students will have access to those sources.

**Course Description:** A thorough study of quantitative genetics that can be of practical usage to the student.

**Student Learning Outcomes:** To learn the practical usage of animal breeding techniques and strategies. Student progress will be evaluated by exams, classroom participation, journal article reviews and homework over class content.

### COURSE REQUIREMENTS

**Attendance:** Required

**Grading:**

Two exams, online discussion, a journal reviews will be the responsibility of the student. A scale of A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = < 60% will be utilized.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam I &amp; II</td>
<td>200 pts.</td>
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<tr>
<td>Home Work</td>
<td>100 pts.</td>
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<tr>
<td>Journal Article Reviews</td>
<td>200 pts.</td>
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<tr>
<td><strong>Total</strong></td>
<td>500 pts.</td>
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COURSE TOPICS

- Statistical concepts
- Mendelian Genetics
- Quantitative phenotypes and genotypes
- Inbreeding and relationship
- Estimation of breeding value
- Selection response
- Search for QTL

COURSE AND UNIVERSITY PROCEDURES/POLICIES

University Specific Procedures:

ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statue that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Code of Student Conduct from Student Guide Handbook).

The professor reserves the right to revise this syllabus during the course; students will be notified in writing of any revisions. The professor reserves the right to assign and/or accept alternative learning activities or extend deadlines as deemed appropriate.