I. The meeting was called to order at 1:08 pm by Chair Mike Darre. Members present: Marilyn Altobello, Rhonda Brownbill, Sal Frasca, Mike Darre, George Elliott, Susan Gregoire, Pat Jepson, Gary Kazmer.

II. The minutes of April 20, 2012 were previously approved electronically and the minutes of the August 21 & 23 Electronic meetings were approved.

III. Old Business:

A. AGNR Major Requirements were approved as revised.

**CANR CC 12-13-04**

**Agriculture and Natural Resources Major**

**Catalog Description**

The Agriculture and Natural Resources major is an interdisciplinary major designed for students who want broad training in agricultural, environmental, and/or health sciences, with content that does not readily align with any one department or major. Students work with advisors to develop and complete a personalized and interdepartmental baccalaureate program based on their educational and career interests and goals. Courses selected for this major will include both introductory and advanced material from multiple departments in the College of Agriculture and Natural Resources, as well as prerequisite and related knowledge and experiences in other disciplines.

**Requirements**

**Biology:** One course from: BIOL 1107, 1108, 1110

**Chemistry:** One course from: CHEM 1122, 1124Q, 1127Q, 1137Q

**Additional Science or Math:** One additional course (minimum 3 credits) from BIOL, CHEM, GSCI, MARN, or PHYS, or one extra MATH or STAT course beyond those required for general education requirements

**Introductory AGNR:** Two 1000 level courses (minimum 3 credits each) representing two departments in CANR. (AGNR, AH, ANSC, ARE, HORT, LAND, NRE, NUSC, PLSC, PVS, SOIL, TURF)

**36 Credit Group:** Courses in the for Agriculture and Natural Resources majors must meet all the requirements listed under the 36 Credit requirements for all CANR majors, and also the more stringent requirements below:

- Courses must include at least six credits (each) from three departments in CANR
- Courses must include at least 24 credits (combined total) from departments CANR

**Writing Competency:** Students must pass one 2000-level or above W course in any department of the College of Agriculture and Natural Resources (AH, ANSC, ARE, HORT, LAND, NRE, NUSC, PLSC, PVS, SOIL, TURF).

**Computer Technology Competency:** Satisfied by University entrance expectations.

**Information Literacy Competency:** Satisfied by meeting the Writing Competency Requirement.

**Career Statement:** Agriculture and Natural Resources majors must submit a statement describing how courses relate to their desired career. This statement and courses for the major must be approved by advisor
and CANR Associate Dean as early as possible in order to confirm the courses approved for the final Plan of Study.

B. AG Biotech Minor – The plan for the AG Biotech Minor needs review by the Ag Biotech committee for clarification of courses and final text for document. It will be referred back to the committee for action.

IV. New Business:
A. The Department of Agriculture and Resource Economics proposes the following actions:
   1. REVISE: ARE 4462 Environmental and Resource Economics. Change in Prerequisites-Add Calculus. Effective Spring 2013
      **Current Title and Catalog Copy:** ARE 4462. Environmental and Resource Economics (235)
      Three credits. Prerequisite: ARE 1150 or ECON 1200 or ECON 1201; open to juniors or higher. Credit may not be received for both ARE 4462 and 5462.
      Natural resource use and environmental quality analysis using economic theory. Reviews of empirical research and relevant policy issues.
      **Revised Title and Catalog Copy:** ARE 4462. Environmental and Resource Economics (235) Three credits. Prerequisite: ARE 1150 or ECON 1200 or ECON 1201; MATH 1071Q or MATH 1110Q or MATH 1120Q or MATH 1126Q or MATH 1131Q; open to juniors or higher. Credit may not be received for both ARE 4462 and 5462.
      Natural resource use and environmental quality analysis using economic theory. Reviews of empirical research and relevant policy issues.
      
      MOTION PASSED CANR CC 12-13-05

B. The Department of Pathobiology and Veterinary Science proposes the following actions:
   1. ADD: PVS 5303 Veterinary Pathology Lecture Series Effective Spring 2013
      **Proposed Catalog Copy:**
      PVS 5303. Veterinary Pathology Lecture Series. 1-3 credits. Lecture. Instructor consent required.
      Lectures on veterinary and comparative anatomic pathology organized by animal species or disease classification utilizing lectures on electronic media in the context of a prescribed plan of study. May be repeated for credit with change in content.
      
      MOTION PASSED CANR CC 12-13-06

   2. ADD: Combined Residency and Graduate Program in Pathobiology Effective Fall 2012
      **CURRICULUM**
      COMBINED RESIDENCY AND GRADUATE PROGRAM IN PATHOBIOLOGY
      
      MASTERS OF SCIENCE IN PATHOBIOLOGY
      AREA OF CONCENTRATION: VETERINARY ANATOMIC PATHOLOGY
      
      **YEAR 1:**
      
      FALL SEMESTER
      - Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
      - Veterinary Pathology Seminar, PVS 5394 2 credits
      - Current Veterinary Pathology Literature, PVS 5094 1 credit
      - Veterinary Pathology Lecture Series, PVS 5303 3 credits*
      
      * Students receiving a Teaching Assistantship assist with PVS 3100 (Histology) and PVS 2100 (Anatomy &Physiology) and may opt out of PVS 5303 or enroll for less than 3 credits; students not receiving a Teaching Assistantship must take PVS 5303 for 3 credits.
SPRING SEMESTER:
- Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
- Veterinary Pathology Seminar, PVS 5394 2 credits
- Current Veterinary Pathology Literature, PVS 5094 1 credit
- Principles of Pathobiology, PVS 4300 3 credits
- Veterinary Pathology Lecture Series, PVS 5303 3 credits*
* Students receiving a Teaching Assistantship assist with PVS 2100 (Health and Disease Management of Animals) and may opt out of PVS 5303 or enroll for less than 3 credits. Students may petition their Graduate Committee to be exempt from PVS 4300, in which case 3 credits of PVS 5303 is required, or 1 credit of PVS 5303 and 2 credits from PVS 5431, Avian Pathology.

SUMMER:
Pathology Service Duty, May through August†
† Opportunities exist for one-month externships. International students must receive authorization by the University to engage in externships with pathology groups off Storrs campus.

YEAR 2:
FALL SEMESTER
- Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
- Veterinary Pathology Seminar, PVS 5394 2 credits
- Current Veterinary Pathology Literature, PVS 5094 1 credit
- Veterinary Pathology Lecture Series, PVS 5303 3 credits*
* Students receiving a Teaching Assistantship assist with PVS 3100 (Histology) and PVS 2100 (Anatomy & Physiology) and may opt out of PVS 5303 or enroll for less than 3 credits; students not receiving a Teaching Assistantship must take PVS 5303 for 3 credits.

SPRING SEMESTER:
- Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
- Veterinary Pathology Seminar, PVS 5394 2 credits
- Current Veterinary Pathology Literature, PVS 5094 1 credit
- Veterinary Pathology Lecture Series, PVS 5303 3 credits*
* Students receiving a Teaching Assistantship assist with PVS 2100 (Health and Disease Management of Animals) or PVS 4300 (Principles of Pathobiology) and may opt out of PVS 5303 or enroll for less than 3 credits; students not receiving a Teaching Assistantship must take PVS 5303 for 3 credits, or alternatively may take 1 credit of PVS 5303 and at least 2 credits of a PVS elective.
  - PVS Grad Elective, e.g. PVS 5431, Avian Pathology (2cr)#
  or PVS 5202, Viral Pathogenesis (2cr)# 1-3 credits
# May only be taken once for credit

SUMMER:
Pathology Service Duty, May through August†
† Opportunities exist for one-month externships. International students must receive authorization by the University to engage in externships with pathology groups off Storrs campus.

YEAR 3:
FALL SEMESTER
- Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
- Veterinary Pathology Seminar, PVS 5394 2 credits
- Current Veterinary Pathology Literature, PVS 5094 1 credit
- Veterinary Pathology Lecture Series, PVS 5303 3 credits*
* Students receiving a Teaching Assistantship assist with PVS 3100 (Histology) and PVS 2100 (Anatomy & Physiology) and may opt out of PVS 5303 or enroll for less than 3 credits; students not receiving a Teaching Assistantship must take PVS 5303 for 3 credits.

SPRING SEMESTER:
- Practicum in Veterinary Anatomic Pathology, PVS 5392 3 credits
- Veterinary Pathology Seminar, PVS 5394 2 credits
- Current Veterinary Pathology Literature, PVS 5094 1 credit
- Veterinary Pathology Lecture Series, PVS 5303 3 credits*

* Students receiving a Teaching Assistantship assist with PVS 2100 (Health and Disease Management of Animals) or PVS 4300 (Principles of Pathobiology) and may opt out of PVS 5303 or enroll for less than 3 credits; students not receiving a Teaching Assistantship must take PVS 5303 for 3 credits, or alternatively may take 1 credit of PVS 5303 and at least 2 credits of a PVS elective.

- PVS Grad Elective, e.g. PVS 5431, Avian Pathology (2cr)#
  or PVS 5202, Viral Pathogenesis# 1-3 credits
  #May only be taken once for credit

SUMMER:
- Pathology Service Duty, May through August
- Convene Masters Committee (Faculty Pathologists)
- Take Final Examination before end of August
- Leave program end of August qualified to sit the ACVP Board Examination that September

MINIMUM GRADUATE CREDITS EARNED
54 graduate credits if self-funded
39 graduate credits if receiving a Teaching Assistantship
[A minimum of 24 graduate credits is needed for the Plan B (non-thesis) Masters]

MINIMUM TIME OF SUPERVISED PATHOLOGY TRAINING 36 MONTHS‡
‡Meets the ACVP requirement of at least 36 months of supervised training in pathology necessary to sit ACVP certification examination.

PhD OPTION
Students who have identified a research question and worked with faculty to establish external funding may transfer to the PhD program after completing the 3 year residency/Masters.

TRANSITION TO FULL-TIME PhD STUDENT

YEAR 4:

FALL SEMESTER
- Take ACVP Board examination in September
- FULL-TIME PhD STUDENT – i.e., off the pathology service
- Enter into the research laboratory of the Major Advisor of the PhD
- PVS 5401, Immunobiology 3 credits
- PVS 5632, Vaccines: Mechanisms of Immune Protection 3 credits
- May include graduate coursework from other Departments and dissertation research to be determined by the PhD committee advisors.
- Submit Plan of Study to the Graduate School.

SPRING SEMESTER
- Continue as a full-time PhD student under direction of PI and PhD Committee
- PVS 5503, Molecular Approaches to Disease Diagnosis & Prevention 2 credits
- PVS 5502, Evaluation of Diagnostic Test 2 credits
- May include a graduate coursework from other Departments and dissertation research to be determined by the PhD committee advisors.
• Take the General Examination for the PhD degree.

**YEAR 5:**

**FALL SEMESTER**
- Full-Time Doctoral research under direction of PI and PhD Committee
- Complete Dissertation Proposal presentation and examination.
- GRAD 5930

**SPRING SEMESTER**
- Full-Time Doctoral research under direction of PI and PhD Committee
- GRAD 5930

**YEAR 6:**

**FALL SEMESTER**
- Full-Time Doctoral research under direction of PI and PhD Committee
- GRAD 5930

**SPRING SEMESTER**
- Complete PhD thesis and Dissertation Defense presentation and examination.
- GRAD 5930

PHD REQUIREMENTS OF THE GRADUATE SCHOOL FULFILLED.

**MOTION PASSED CANR CC 12-13-07**

3. REVISE: Catalog copy for Pathobiology (information only)

   **Pathobiology**

   Department Head
   Professor Steven J. Geary

   Professors
   Bushmich, Garmendia, Geary, Kerr, Khan, Smyth

   Associate Professors
   De Guise, Frasca, Risatti

   Assistant Professors
   Verardi

   Clinical Assistant Professors
   Palanisamy

   Assistant Research Professors
   Levin

   Joint Appointments
   Silbart (AHS)

   Adjunct Professors
   Andreadis, Borca, Girschick, Grubman, Golde, Innis, Rodriguez, Romano, Smolowitz, Tsongalis, West, White

Graduate instruction leading to the M.S. and Ph.D. degrees is offered by the Department of Pathobiology and Veterinary Science. M.S. degrees are granted in Pathobiology. Ph.D. degrees are granted in Pathobiology with areas of concentration in bacteriology, pathology and virology. Standard admission requirements are maintained for these programs. The Department also offers a combined residency/M.S. program to students with the D.V.M., V.M.D. or equivalent degree. This program is a full-time three year course of study leading to the M.S. degree with an area of concentration in veterinary anatomic pathology. Options exist for students in
the residency/M.S. program to pursue the Ph.D. degree. In all these programs, the common emphasis is on basic science as related to diseases of animals and man.

Requirements:

For the M.S. degree, generally 15 credits of course work and a thesis are required. The Department does offer a non-thesis M.S. degree for which 24 credits of course work is required. Students enrolled in the combined residency/M.S. program must provide evidence of completion of a veterinary school curriculum and participate in a prescribed sequence of courses and training experiences that is 36 months in duration. The sequence of courses for the Ph.D. degree is not established. Students pursuing one of the three areas of concentration for the Ph.D degree may have different plans of study as determined by their Graduate Committees. A minimum of 44 credits of course work beyond the baccalaureate and 20 credits beyond the Master's degree is expected for the Ph.D. degree. Graduate course work in immunology, toxicology, biochemistry, cell biology, genetics, statistics and molecular biology are generally common to the areas of concentration for the Ph.D. degree.

Special Facilities:

The Department is the location of the Connecticut Veterinary Medical Diagnostic Laboratory, which is an AAVLD-accredited veterinary diagnostic laboratory equipped with fully functioning mammalian and non-mammalian necropsy facilities, histology laboratory, and diagnostic microbiology, molecular, and serology laboratories. The Department maintains research facilities for investigation of infectious, immunologic and toxicologic diseases. The Department houses the Center of Excellence for Vaccine Research. Members of the faculty hold adjunct appointments with the Department of Molecular and Cell Biology and the USDA Plum Island Animal Disease Center.

C. The Department of Animal Science proposes the following:

1. **ADD: ANSC 3311 Comparative Exercise Physiology Effective Spring 2014**
   
   CANR CC 12-13-08  Motion Tabled for input from instructor on proposed modifications to prerequisites.

D. The Department of Nutritional Science proposes the following:

1. **ADD: NUSC 1161 Husky Reads Effective Spring 2013**
   
   (to be cross listed with EKIN 1161)
   
   **Proposed Catalog Copy:**
   
   NUSC 1161. Husky Reads: Introducing Food and Nutrition to Children through Reading. (Also offered as EKIN 1161.) One credit. Supervised field work and experiential learning in nutritional literacy for preschoolers and young children, geared to individual, dual, and team activities. Readings and reflections.
   
   **MOTION PASSED CANR CC 12-13-09**

2. **ADD: NUSC 5398: Special Topics Diet and Aging Effective Spring 2013**
   
   **Proposed Catalog Copy:**
   
   NUSC 5398: Diet and Aging. Second Semester. Two credits. Prerequisites: NUSC 5200 Macronutrient Metabolism, Undergraduate Organic Chemistry Course, Undergraduate Biochemistry Course
   
   The relationship between diet and the physiological and metabolic changes in cells, tissues and organs/systems during aging with clinical implications.
   
   **MOTION PASSED CANR CC 12-13-10**

3. **REVISE: NUSC 4236 Principles of Nutrition Effective Spring 2013**
   
   (Increase credits from 3 to 4)
   
   **Current Title and Catalog Copy:**
   
   NUSC 4236 Principles of Nutrition
   
   
   **Revised Title and Catalog Copy:**
NUSC 4236 Principles of Nutrition. Second semester. Four credits. Prerequisite NUSC 1165 and MCB 2000 or 3010. Lee
Function and metabolism of carbohydrates, proteins, fats, minerals and vitamins.

MOTION PASSED CANR CC 12-13-11

4. ADD: NUSC 4295 Special Topics Healthy Aging Effective Spring 2013

   Proposed Catalog Listing:
   NUSC 4295. Special Topics: Healthy Aging. Three credits. Prerequisite: NUSC 1165.
   Recommended: NUSC 3172. For Juniors and Seniors; Consent of Instructor required.
   Lecture, learning laboratory, and supervised field work in community settings with older
   adults. Readings, discussions, reflections, and final paper.

MOTION PASSED CANR CC 12-13-12

E. Allied Health Science

1. ADD: AH 4095-001: Special Topics: Biostatistics for Health Professions. First time
   offering - Spring 2013.
   **AH 4095-001: Special Topics: Biostatistics for Health Professions**
   3 credits; prerequisite: a course in pre-calculus or higher; STATS 1000Q or 1100Q or higher.
   Open to CANR students and
   Statistics majors, juniors or higher; others with instructor consent.
   This course will present basic statistical methods to a broad range of medical or public
   health problems. The course will emphasize the use of these methods and the
   interpretation of results.

MOTION PASSED CANR CC 12-13-13

2. ADD: AH 4095-002: Special Topics: EMT Training. Second time offering -
   Spring 2013
   **AH 4095-002: Special Topics: EMT Training**
   4 credits.
   Instruction in basic life support skills such as CPR, airway management, treatment of
   bleeding control and shock recognition, care for trauma victims, medical emergencies,
   OB/GYN, and pediatrics. Completion of the program will include training in HAZMAT
   Awareness, CPR, MARK 1 and SMART Triage. Supervised practice experience and hands-on
   instruction of theory. Includes a 10 hour observation experience outside of classroom
   instruction. Meets the performance requirements of the National Registry of Emergency
   Medical Technicians (NREMT) certification exam. Students must first register for this
   course through Hartford Hospital's EMT training program - Additional fees apply.

MOTION PASSED CANR CC 12-13-14

3. ADD: AH 4092: EMT Training. Effective Fall 2013 New Catalog copy:
   **AH 4092: EMT Training**
   4 credits. Prerequisite: Instructor consent required.
   Instruction in basic life support skills, treatment of bleeding control and shock recognition,
   care for trauma victims, medical emergencies. Supervised practice experience and hands-on
   instruction of theory. Includes a 10 hour observation experience outside of classroom
   instruction. Meets the performance requirements of the National Registry of Emergency
   Medical Technicians (NREMT) certification exam. Students must first register for Hartford
   Hospital's EMT training program (separate Hartford Hospital program costs apply).

MOTION PASSED CANR CC 12-13-15

4. REVISE: A-3 for the Allied Health Sciences major - Standard plan and
   Health Sciences concentration. **Add: AH 4092: EMT Training. Effective Fall
   2013. Current Catalog copy:**
   Allied Health Sciences with Health Sciences concentration
Group A: A-1 AH 2001, 4239 and 4240W; A-2 and; two of the following: AH 2000, AH 4242, AH 4244; A-3 and; minimum of 8 credits (or three additional courses) from the CANR from the following list of options. Other courses may be used to meet this requirement pending advisor and department head approval. Courses cannot also be used to meet Group A-2 requirements: AH 3021, 3101, 3121, 3133, 3175; DGS 3222, 3226, 4224, 4234, 4246; MLSC 3130; NUSC 4236, 4250; PVS 3100, 4300

Revised Catalog copy:
Allied Health Sciences with Health Sciences concentration
Group A: A-1 AH 2001, 4239 and 4240W; A-2 and; two of the following: AH 2000, AH 4242, AH 4244; A-3 and; minimum of 8 credits (or three additional courses) from the CANR from the following list of options. Other courses may be used to meet this requirement pending advisor and department head approval. Courses cannot also be used to meet Group A-2 requirements: AH 3021, 3101, 3121, 3133, 3175; DGS 3222, 3226, 4224, 4234, 4246; MLSC 3130; NUSC 4236, 4250; PVS 3100, 4300

5. Revise AH 4243 Health Care Issues for the Health Professional to change description. Effective Fall 2013.

Current Catalog copy:
4243. Health Care Issues for the Health Professional
(243) Three credits. Three hours of lecture. Prerequisite: Open to Allied Health Sciences, Dietetics, Medical Laboratory Sciences, Diagnostic Genetic Sciences and Nutritional Sciences majors, others with consent of instructor; open to juniors or higher.
Individual, community and institutional health care needs and issues from a bio-medical and socio-cultural point of view. The health care delivery system; health and its relationship to poverty, ethnicity, life-cycle events, ethics, etc.

Revised Catalog copy:
4243. Health Care Issues for the Health Professional
(243) Three credits. Prerequisite: Open to Allied Health Sciences, Dietetics, Medical Laboratory Sciences, Diagnostic Genetic Sciences and Nutritional Sciences majors, others with consent of instructor; open to juniors or higher.
Individual, community and institutional health care needs and issues from a bio-medical and socio-cultural point of view. Health and its relationship to genetics, poverty, ethnicity, life-cycle events, ethics, etc.

MOTION PASSED CANR CC 12-13-17

6. AH 2093 Foreign Studies to change title to Foreign Studies in Allied Health and to change grading to S/U. Effective Fall 2013.

Current Catalog copy:
2093. Foreign Studies
Variable credit (1-6). Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. May be repeated for credit; may count up to 6 credits toward the major with consent of advisor and Department Head. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of Foreign Study, Independent Study and Internship credits.
Courses taken in Allied Health and related areas as part of an approved Study Abroad Program.

Revised Catalog copy:
2093. Foreign Studies in Allied Health
Variable credit (1-6). Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. May be
repeated for credit; may count up to 6 credits toward the major with consent of advisor and Department Head. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of Foreign Study, Independent Study and Internship credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). Courses taken in Allied Health and related areas as part of an approved Study Abroad Program.

MOTION PASSED CANR CC 12-13-18


Current Catalog copy:
4093. Foreign Study in Allied Health
Variable (1 - 6) credits. Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of foreign study, Independent Study and Internship credits. May be repeated for credit; may count up to 6 credits toward major with consent of advisor and Department Head.
Courses taken in Allied health and related areas as part of an approved Study Abroad Program.

Revised Catalog copy:
4093. Foreign Study in Allied Health
Variable (1 - 6) credits. Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of foreign study, Independent Study and Internship credits. May be repeated for credit; may count up to 6 credits toward major with consent of advisor and Department Head. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).
Courses taken in Allied health and related areas as part of an approved Study Abroad Program.

MOTION PASSED CANR CC 12-13-19

8. Drop: AH 3133 Cancer and your Health as a group A-3 course option for the Allied Health Sciences major/Health Sciences concentration. Effective Fall 2013.

Current Catalog copy:
Allied Health Sciences with Health Sciences concentration
Group A: A-1 AH 2001, 4239 and 4240W; A-2 and; two of the following: AH 2000, AH 4242, AH 4244; A-3 and; minimum of 8 credits (or three additional courses) from the CANR from the following list of options. Other courses may be used to meet this requirement pending advisor and department head approval. Courses cannot also be used to meet Group A-2 requirements: AH 3021, 3101, 3121, 3133, 3175; DGS 3222, 3226, 4224, 4234, 4246; MLSC 3130; NUSC 4236, 4250; PVS 3100, 4300

Revised Catalog copy: {remove from group A-3 listing for HESCI conc.}
Allied Health Sciences with Health Sciences concentration
Group A: A-1 AH 2001, 4239 and 4240W; A-2 and; two of the following: AH 2000, AH 4242, AH 4244; A-3 and; minimum of 8 credits (or three additional courses) from the CANR from the following list of options. Other courses may be used to meet this requirement pending advisor and department head approval. Courses cannot also be used to meet Group A-
2 requirements: AH 3021, 3101, 3121, 3133, 3175; 4092; DGS 3222, 3226, 4224, 4234, 4246; MLSC 3130; NUSC 4236, 4250; PVS 3100, 4300

MOTION PASSED CANR CC 12-13-20

VII. The meeting adjourned at 2:30 PM. The next meeting is on Friday, October 5. 2 pm. York Room in GW