

# Minutes of the Graduate Council

## December 5, 2000

*As approved by the Graduate Council, February 6, 2001*

**Members present:** A. Barkley, A. Bennett, T. Bolton, A. Brightman, K. Brooks (D. Sachs proxy), K. Carpenter, A. Cochran, M. Collinson, L. Davis, J. Dees, L. Glasgow, K. Hughey, C. Lubbers, H. Marcoux, J. McCulloh, E. Minton, B. Montelone, B. Niehoff (D. Vruwink proxy), C. Rice, D. Sachs, C. Shanklin, K. Shultis, J. Staver, G. Stewart, C. Thompson, L. Thurston, R. Trewyn, D. Vruwink, M. White, K. Williams

**Members absent:** G. Bailey, L. Freeman, P. Gormely, S. Kiefer, N. Zhang

**Graduate School staff present:** J. Barnhart, J. Guikema, B. McGaughey

The meeting was called to order by Dean Ron Trewyn at 3:35 p.m. in Room 213, Student Union.

### 1. Opening Remarks.

Dean Trewyn reminded the council that the Graduate School commencement will be held on Friday, December 8, at 1:00 p.m. Tickets will be issued for family and friends attending commencement.

The position description for the part-time Assistant Dean of the Graduate School was distributed. At least one member of each of the Graduate Council committees and a member of the Graduate Student Council will be asked to serve on an ad hoc search committee.

2. **Minutes.** The minutes of the October 3, 2000, meeting were approved as read.

### 3. Graduate School Actions and Announcements

#### a. Appointments for Graduate Faculty Membership

Name	Department/Program
John M. Crespi	Agricultural Economics
Joye C. Gordon	Journalism & Mass Communications
Philip W. Nel	English
Jeff M. Peterson	Agricultural Economics
Marc T. Smith	Landscape Architecture/Regional & Community Planning

#### b. Emergency Non-Graduate Faculty to teach Graduate Courses (*One-year Approval*)

Name	Department/Program	Courses	Term
Steven R. Hanna	Industrial Mfg Sys Engg	IMSE 805	S01
John M. Dugan	Landscape Architecture/Regional & Community Planning	PLAN 820	F00

4. **Academic Affairs Committee**

1. **Graduate Faculty nominations:**

It was moved and seconded that the following faculty members be approved for Membership and Certification to direct doctoral students. The motion passed.

1. **for MEMBERSHIP ONLY**

<b>Name</b>	<b>Department/Program</b>
Nancy Jaax	Animal Sciences and Industry
Catherine Katsar	Entomology

2. **for MEMBERSHIP AND CERTIFICATION**

<b>Name</b>	<b>Department/Program</b>
Jennifer M. Bay	Elementary Education
Gregory F. Grauer	Clinical Sciences

2. **Course and curriculum changes:**

It was moved and seconded to approve courses proposed for graduate credit or course changes. Motion passed.

1. **CHANGE**

<b>Current Course Description</b>	<b>Proposed Course Description</b>
<p><b>AGEC 700. Applied Agribusiness Economics.</b> (3) S. Application of economics principles to problems of agricultural production and agribusinesses. Demand analysis will be used to examine changes in individual and market demand. Cost minimization and profit maximization will be used to examine firm and market decisions. Pr.: MATH 100, ECON 120 or AGECEC 120.</p>	<p><b>AGEC 700. Applied Agribusiness Economics.</b> (3) II. <u>Applications of economic principles to problems of agricultural production and agribusinesses. Demand theory and economic forecasting will be used to examine changes in demand and business trends. Cost minimization and profit maximization will be used to examine firm and market issues.</u> PR.: MATH 100, ECON 120 or AGECEC 120.</p>
<p><b>AGEC 701. Introduction to Computer Decision Tools for Agribusiness.</b> (1) II. Development of decision tools for agribusiness using spreadsheets. Topics include</p>	<p><b>AGEC 701. Introduction to Computer Decision Tools for Agribusiness.</b> (1) II. Development of decision tools for agribusiness using spreadsheets. Topics include</p>

internet as a data source, budget development and analysis, simulation, regression, search techniques, and optimization. Pr.: CIS 110.	internet as a data source, budget development and analysis, <u>financial calculations</u> , regression, search techniques, and optimization. Pr.: CIS 110.
<b>AGEC 712. Linear Programming Applications in Agricultural Economics.</b> (3) II. Application of linear programming and related topics for decision analysis in agricultural firms. Pr.: AGECE 500.	<b>AGEC 712. <u>Optimization Techniques for Agricultural Economics</u>.</b> (3) II. <u>Application of optimization techniques including linear programming and nonlinear programming for research and decision analysis in agricultural economics.</u> Pr.: AGECE 500.
<b>AGEC 713. Agribusiness Financial Management.</b> (2) II. This course covers financial management, long-term investment analysis, and the cost of capital for agribusiness. Topics covered include long-term decision-making, valuation of durable assets, investment utilization strategies, accounting for risks, and liquidity relationships. Applications include agribusiness decision making, valuing research and project analysis. Pr.: ACCTG 231, AGECE 513.	<b>AGEC 713. Agribusiness Financial Management.</b> (3) II. This course covers financial management, long-term investment analysis, <u>the performance of alternative investments, and the theory of efficient markets.</u> Topics covered <u>include comparative financial analysis, short-term budgeting, and capital budgeting.</u> Applications <u>include agribusiness decision making and project analysis.</u> Pr.: ACCTG 231, AGECE 513.
<b>AGEC 720. Agribusiness Risk Management.</b> (2) II. Various forms of risk inherent to firms operating in agricultural and food product markets are explored. The most prevalent sources of risk are investigated along with their likely short- and long-run financial impacts on agribusiness firms. Measures of assessing risks in agribusinesses are identified including price, production, product quality, and firm strategic positioning risk. Focus is on managing risks inherent in global agricultural commodity and food	<b>AGEC 720. Agribusiness Risk Management.</b> (3) I. Various forms of risk inherent to firms operating in agricultural and food product markets are explored. <u>Risk management techniques including diversification, insurance, forward contracting, hedging and options are examined through applied problems with the use of simulation.</u> <u>Emphasis is placed on managing risk associated with input prices, output prices, enterprise organization and financial instruments.</u> Pr.: <u>AGECE 713 and AGECE 761.</u>

<p>product markets. Pr.: AGECE 420 and AGECE 760.</p>	
<p><b>AGECE 730. Applied Agribusiness Logistics.</b> (2) II. Applied study of agribusiness logistics using case study analysis along with the study of principles and concepts that structure agribusiness decisions concerning logistics and operations configuration. Studies will show the role and scope of logistics in agribusiness, develop the connection between economic developments and logistics, explore the role of transactions costs and the principal-agent problems associated with outsourcing and strategic alliances, explore emerging technologies and tools for logistics planning--such as information technology and ECR, outsourcing, just-in-time inventory systems, total quality management, least cost arrangements and forecasting demand for logistical services. Pr.: AGECE 120 or ECON 120 and AGECE 701.</p>	<p><b>AGECE 730. Applied Agribusiness Logistics.</b> (3) II. <u>A study of agribusiness logistics and the fundamental concepts underpinning logistical decisions and their impact on a firm's sustainability. Topics include supply chain management, transportation and storage, contracting and out sourcing, strategic logistic planning, network analysis, and B2B e-commerce in food and agriculture. Focus will be on agribusiness logistics issues in grain and grain-based food supply chains and in the livestock and meat supply chains, including global logistics . Pr.: AGECE 120 or ECON 120, and AGECE 505 .</u></p>
<p><b>AGECE 760. Quantitative Methods for Agribusiness Professionals.</b> (3) I. The development of quantitative and analytical tools and their application to applied agribusiness decision making. Regression techniques will be applied to price analysis/forecasting and estimation of supply and demand functions. Optimization techniques including linear and non-linear programming will be applied to a variety of agribusiness problems such as logistics, cost management, and portfolio evaluation. Pr.: STAT 330 and AGECE 701.</p>	<p><b>AGECE 760. Applied Econometric Analysis .</b> (3) II. <u>Use of econometrics to enhance agribusiness decision making is the focus. Concepts of simple and multiple regression and limited dependent variable models are presented. Econometric issues of functional form, relevant variables, predictive performance, and model diagnostics will be examined. Numerous applications of techniques to agribusiness problems are used . Pr.: STAT 330 and AGECE 701.</u></p>

<p><b>AGEC 770. International Agribusiness and Policy Analysis.</b> (2) II. Policies affecting agribusiness firms will be examined. These topics may include U.S. agricultural policies, fiscal and monetary policies, international trade agreements, environmental issues, and current policies influencing agribusiness firms. Pr.: ECON 110 and AGECE 701.</p>	<p><b>AGEC 770. International Agribusiness and Policy Analysis.</b> (3) II. Policies affecting agribusiness firms will be examined. These topics include U.S. agricultural policies, fiscal and monetary policies, international trade agreements, environmental issues, and current policies influencing agribusiness firms. Pr.: ECON 110 and AGECE 701.</p>
<p><b>BIOCH 766. Biochemistry II Laboratory.</b> (2) II. A continuation of BIOCH 756. Six hours lab a week. Pr.: BIOCH 756 and 765 or conc enrollment.</p>	<p><b>BIOCH 766. <u>Recombinant DNA Laboratory I.</u></b> (1) II. <u>Biochemical manipulation of nucleic acids.</u> <u>Isolation and restriction enzyme characterization of plasmid DNA,</u> <u>ligation of DNA fragments to vector DNA,</u> <u>polymerase chain reaction,</u> <u>Southern blot analysis,</u> <u>DNA sequencing and analysis.</u> Two three-hour labs per week. Meets first half of semester. Pr.: BIOCH 522 .</p>
<p><b>BIOCH 845. Hormones.</b> (3) I, in even years or on sufficient demand. The structure, biosynthesis, biochemical role, metabolism, and interrelations of hormones in vertebrates and invertebrates. Pr.: BIOCH 765.</p>	<p><b>BIOCH 911. <u>Molecular Signal Transduction.</u></b> (3) I, in even years. <u>The molecular structure,</u> <u>biochemical role, and interrelationships of signaling molecules such as receptors, G proteins, channels, and adaptor proteins in signal transduction pathways.</u> Pr.: BIOCH 765.</p>
<p><b>CNS 650. Construction Safety.</b> (2) I, II. Introduction to safety and safety programs, workers' compensation, OSHA organization and structure, safety policies and record keeping, safety standards. Emphasis will be on communication and job-site safety management. On-site safety inspections will be required with in class presentation and written reports to be submitted.</p>	<p><b>CNS 650. Construction Safety.</b> (2) II. Introduction to safety and safety programs, workers' compensation, OSHA organization and structure, safety policies and record keeping, safety standards. Emphasis will be on communication and job-site safety management. On-site safety inspections will be required with in class presentation and written reports to be submitted. Two hours</p>

Two hours rec. a week. Pr.: CNS 642.	rec. a week. <u>Pr. or conc.: CNS 535 and CNS 540.</u>
<b>EECE 624. Power Electronics.</b> (3) I. Theory and application of semiconductor devices to the control and conversion of electric power, control of DC and AC machines, design of electronic power circuits such as inverters, controlled rectifiers, and choppers using diodes, diacs, thyristors, triacs, and power transistors. Three hours rec. a week. Pr.: EECE 581 and 512. Pr. or conc.: EECE 526.	<b>EECE 624. Power Electronics.</b> (3) I. Theory and application of semiconductor devices to the control and conversion of electric power, control of DC and AC machines, design of electronic power circuits such as <u>controlled rectifiers, converters and inverters</u> using diodes, thyristors, triacs, and power transistors. Three hours rec. a week. Pr.: EECE 581, <u>511, and 525.</u>
<b>FSHS 706. Practicum in Audiology.</b> (1-3) I, II, S. Supervised practice in the use of equipment, materials, and methods of audiology. Pr.: FSHS 720 or concurrent enrollment and consent of instructor. May be taken for more than one semester.	<b>FSHS 706. Practicum in Audiology.</b> (1-3) I, II, S. Supervised practice in the use of equipment, materials, and methods of audiology. Pr.: FSHS <u>567</u> or concurrent enrollment and consent of instructor. May be taken for more than one semester.
<b>FSHS 744. Aural Rehabilitation.</b> (3) I. Study of techniques for the habilitation or rehabilitation of speech and language problems of the hearing impaired. Pr.: FSHS 720.	<b>FSHS 744. Aural Rehabilitation.</b> (4) <u>S.</u> Study of techniques for the habilitation or rehabilitation of speech and language problems of the hearing impaired. Pr.: FSHS <u>567.</u>
<b>FSHS 750. Voice and Resonance Disorders.</b> (4) II. Research and theory concerning etiology, characteristics, assessment, and management of individuals with laryngeal disorders and orofacial anomalies. Pr.: FSHS 550.	<b>FSHS 750. Voice Disorders.</b> (3) II. <u>Research and theory dealing with the etiologies, characteristics, assessment, and management of individuals with laryngeal disorders.</u> Pr.: <u>FSHS 735.</u>
<b>FSHS 840. Neuropathologies of Speech.</b> (3) I. Research and theory concerning nature, etiologies, evaluation, and principles of neuropathologies. Pr.: FSHS 350.	<b>FSHS 760. Neuromotor Speech Disorders.</b> (3) I. <u>An introduction to motor speech disorders including an overview of the neurological system.</u> Research and practical knowledge

	<p><u>concerning etiologies, evaluation, and principles of treatment are addresses. Pr.: FSHS 360.</u></p>
<p><b>FSHS 841. Acquired Language Disorders.</b> (3) II. Research and theory concerning the nature, etiologies, evaluation, and treatment of aphasia and language disorders associated with right hemisphere damage, dementia, and traumatic brain injury. Pr.: FSHS 840.</p>	<p><b>FSHS 841. <u>Acquired Language and Cognitive Disorders.</u></b> (4) II. <u>Study of acquired language and cognitive-communicative disorders in adults. Content addresses research and applied knowledge concerning etiologies, evaluation, and treatment of aphasia and communication deficits that result from right hemisphere damage, dementia, and traumatic brain injury. Pr.: FSHS 760.</u></p>
<p><b>FSHS 851. Professional Issues in Speech -Language Pathology.</b> (2) I. Deals with issues related to professional practice in communication disorders. Includes lectures, discussions, presentations, and observations. It is strongly recommended that this course be taken concurrently with FSHS 847. Pr.: FSHS 705 and consent of the instructor.</p>	<p><b>FSHS 851. Professional Issues in Speech -Language Pathology.</b> (2) <u>S</u>. <u>An overview of current professional issues in speech-language pathology. Primary topics include professional and ethical practices, scope of practice and service delivery, preparation for employment, and credentialing. This course can be taken concurrently with FSHS 847.</u> Pr.: FSHS 705 and consent of instructor.</p>
<p><b>FSHS 897. Graduate Seminar in Communication Sciences and Disorders.</b> (3) I, II. Advanced course providing critical analysis of recent theory and research in a designated topic area. May be repeated with a change in subject matter. Pr.: FSHS 560 and consent of the instructor.</p>	<p><b>FSHS 897. Graduate Seminar in Communication Sciences and Disorders.</b> (1-3) <u>S</u>. Advanced course providing critical analysis of recent theory and research in a designated topic area. May be repeated with a change in subject matter. Pr.: FSHS 560 and consent of the instructor.</p>
<p><b>GEOL 605. Exploration Geophysics.</b> (3) I. Seismic, gravity, magnetic, and electrical methods used in geophysical exploration for</p>	<p><b>GEOL <u>650</u>. Exploration Geophysics.</b> (3) I. Seismic, gravity, magnetic, and electrical methods used in geophysical exploration for</p>

<p>petroleum accumulations and for mineral deposits. Three hours rec. a week. Pr.: PHYS 214; GEOL 530.</p>	<p>petroleum accumulations and for mineral deposits. <u>Two hours rec. and two hours lab a week</u>. Pr.: PHYS 214; <u>GEOL 640</u>.</p>
<p><b>GRSC 731. Milling Science II Laboratory.</b> (2) I. The processes for milling other grains such as corn, oats, sorghum, different classes of wheat, and rye are studied in the laboratory and by practice on small scale milling units. Six hours lab a week. Pr.: GRSC 730 or conc. enrollment.</p>	<p><b>GRSC 731. Milling Science II Laboratory.</b> (2) I. The processes for milling other grains such as corn, oats, sorghum, different classes of wheat, and rye are studied in the laboratory and by practice on small scale milling units. <u>Concepts of material handling properties of grain products and material handling equipment in dry milling operations will be presented. Concepts of statistical process control and spread sheet modeling in the decision making process will be introduced.</u> Six hours lab a week. Pr.: GRSC 730 or conc. enrollment, <u>STAT 320, PHYS 113, and MATH 205</u>.</p>
<p><b>PHYS 636. Physical Measurements Instrumentation.</b> (4) II. A laboratory-oriented course to acquaint students with electronic circuits, their interfacing with measuring instruments, and their use in making physical measurements. Two hours lec. and six hours lab a week. Pr.: PHYS 214.</p>	<p><b>PHYS 636. Physical Measurements Instrumentation.</b> (5) II. A laboratory-oriented course to acquaint students with electronic circuits, their interfacing with measuring instruments, and their use in making physical measurements. Two hours lec. and six hours lab a week. Pr.: PHYS 214.</p>
<p><b>PSYCH 605. Foundations of Social Behavior.</b> (3) II. Analysis of fundamental psychosocial processes underlying selected problems in contemporary society (e.g., effects on personality and interpersonal relations of changing sex roles, technological innovations, and historical events). Pr.: PSYCH 350. (Psychology majors only)</p>	<p><b>PSYCH 605. <u>Advanced Social Psychology</u>.</b> (3) II. <u>An advanced look at some of the core topics in social psychology (e.g. the self, social influence, personal relationships, prejudice and discrimination, group processes) with a strong emphasis on applying the theory in these areas to current social problems and students' daily lives.</u> Pr. PSYCH 350. (Psychology majors only.)</p>



## 2. DROP

**FSHS 720. Audiology I .** (3) II. Fundamental topics in audiology. Included are monitoring of equipment calibration, pure tone measurements, masking, speech testing, and tympanometry. Laboratory practice is required. Pr.: FSHS 351.

**FSHS 721. Audiology I Laboratory .** (1) II. Effects of noise on hearing. Development, management, and control of community hearing conservation programs. Pr.: FSHS 720 or concurrent enrollment.

**HIST 648. Naval History .** (3) I or II, in alternate years. Ships, technological developments, navies, tactics, warfare, strategy, and the interrelationship between naval thinking and national and international politics. Pr.: Junior standing or consent of instructor.

**HIST 649. Introduction to the History of Aviation .** (3) In alternate years. The development of aviation since the Wrights, providing a world view of man's conquest of the air in both human and technological terms including the development of military, commercial, and general aviation. Pr.: Junior standing or consent of instructor.

## 3. NEW

**AGEC 761. Optimization Techniques for Agribusiness.** (2) I. This course is an introduction to optimization techniques designed to provide quantitative support for agribusiness decision making. Upon completion of this course, students will be able to construct and evaluate optimization models useful for evaluating linear problems, integer problems, and nonlinear program. Pr.: STAT 330 and AGECE 701.

**BIOCH 757. NMR Laboratory.** (1) II. Basic methods and strategies of nuclear magnetic resonance used in the study of biological molecules. Principles and applications of simple one-dimensional and two-dimensional NMR experiments. Two three-hour laboratories per week. Meets second half of semester. Pr.: BIOCH 755.

**BIOCH 758. Protein Structure Laboratory.** (1) II. Principles and uses of computational and experimental approaches for studying peptide and protein structure and dynamics: computer modeling and simulation techniques, fluorescence and circular dichroism spectroscopies, microcalorimetry, and analytical ultracentrifugation. Two three-hour laboratories per week. Meets first half of semester. Pr.: BIOCH 755.

**BIOCH 767. Recombinant DNA Laboratory II.** (1) II. Approaches to study RNA and proteins using recombinant DNA techniques. RNA

extraction and affinity isolation of mRNA, Northern blot analysis, cDNA library construction and screening, bacterial or eukaryotic expression systems, purification and characterization or recombinant proteins, site-directed mutagenesis. Two three-hour labs per week. Meets second half of semester. Pr.: BIOCH 522.

**BIOCH 935. Biochemistry of cell Regulation.** (3) II, in odd years. Integration of biochemical pathways and molecular mechanisms regulating cell growth, movement, differentiation, and death. Emphasis on molecular interactions and signaling cascades controlling gene expression, protein synthesis and folding, proteolysis, cytoskeleton, cell cycle, cell survival, and apoptosis. Pr.: BIOCH 765.

**BIOL 609. Cellular and Molecular Biology of Human Diseases.** (3) I. Fundamental basis of the major common non-infectious diseases and disorders affecting our society, with emphasis on the biochemical and molecular biological mechanisms by which the structures and functions of specific human tissues, organs and systems are altered. Three hours lecture per week. Pr.: BIOL 450 and BIOCH 521.

**BIOL 705. Eukaryotic Genetics.** (3) I. An integrated exploration of transmission genetics and molecular genetics of eukaryotic organisms. The focus will be on genetic model organisms and their contributions to our understanding of mechanisms of genetic transmission and exchange, mutagenesis, gene expression, and regulation of cell division and development. Modern approaches to genomic analysis will be discussed. Pr.: BIOL 450 and BIOCH 521.

**BIOL 707. Advanced Cell Biology.** (3) I. Selected current topics in cell biology which reflect recent advances in the field. Major topics include membranes and transport, protein sorting, signal transduction, cell adhesion and motility, cell cycle, apoptosis, and specialized cell functions. Pr.: BIOL 541.

**BIOL 822. Landscape Ecology.** (3) I, in odd years. Effect of spatial pattern on ecological processes. How spatial complexity emerges and is maintained in ecological systems, the analysis of spatial pattern, scaling issues, the ecological consequences of spatial pattern and applications for conservation and ecosystem management in both aquatic and terrestrial systems. Two lecture hours and three laboratory hours per week. Pr.: BIOL 529.

**EDSEC/EDEL 750. Contemporary Curriculum and Technology Connections.** (3) S. Contemporary curriculum and educational technology theories, methods, and models are examined and connections are developed for instruction and professional development. Specific

methodological and technological skills are combined and applied to enhance student learning. Internet access and e-mail are required. Cross listed: Elementary Education and Secondary Education.

**EDSEC/EDEL 851. Research and Practice in Classroom Technology.**

(2) I. Curriculum, educational technology, and assessment research and theory are examined and aligned with national models and standards for the integration of technology into instruction to support teacher effectiveness and student achievement. Internet access and e-mail are required. Familiarity with a Web page construction kit is recommended. Pr.: Introductory educational technology course or equivalent. Cross listed: Elementary Education and Secondary Education.

**EDSEC/EDEL 858. Classroom Technology Project/Portfolio.** (2) I.

The portfolio as a professional development tool is evaluated according to the National Board of Professional Teaching Standards model and International Society for Technology in Education standards. A technology project with assessment is developed, along with other components, and placed in a professional portfolio. Internet access and e-mail are required. Pr.: Admission to Classroom Technology Speciality or instructor permission. Cross listed: Elementary Education and Secondary Education.

**FSHS 725. Augmentative and Alternative Communication.** (2) II. This

course examines the area of augmentative and alternative communication (AAC) from theoretical and practical perspectives. The etiologies and communicative needs of current and prospective AAC system users, as well as procedures used in evaluation are addressed. Strategies and procedures for implementing AAC systems in educational and acute care/rehabilitative settings are discussed. Opportunities for experience with state-of-the-art technology in AAC are provided at The Capper Foundation. Pr.: FSHS 433, 446, 449, and 705 or concurrent enrollment.

**FSHS 735. Clinical Speech Science.** (3) I. Research and theory dealing

with the physiological and acoustic aspects of speech production. Instrumentation and procedures for observing and measuring aspects of speech breathing, phonation, velopharyngeal function, and articulation will be discussed. Pr.: FSHS 360.

**FSHS 844. Dysphagia.** (3) I. Study of normal and abnormal swallowing

in children and adults. Procedures for assessment, diagnosis, and intervention are explored. Pr.: FSHS 760 or concurrent enrollment.

**GEOL 640. Introduction to Geophysics.** (3) I. Introduction to a broad

area of solid earth geophysics and exploration geophysics, such as plate tectonics, earthquake study, structure and dynamics of the Earth's deep

interior, and geophysical exploration for natural resources. Two hours rec., and two hours lab a week. Pr.: PHYS 114.

**GEOL 642. Field Geophysics.** (3) II. Acquisition and computer processing of geophysical data such as those from seismic reflection, seismic refraction, gravity, magnetic and electrical methods. One hour rec. and four hours lab per week. Pr.: GEOL 640.

**GEOL 644. Computational Geophysics.** (3) II. Computer skills and techniques used in geophysical data processing and analysis such as linear and nonlinear inversion, forward modeling of gravity, magnetic, and seismic data, seismic tomography, seismic anisotropy, and seismic wave attenuation. One hour rec. and four hours lab per week. Pr.: GEOL 640.

**GEOL 890. Advanced Seismology.** (3) On sufficient demand. Mechanics of faulting and earthquakes; seismotectonics; advanced data analysis; seismic wave propagation in three-dimensionally inhomogeneous media; earthquake prediction and hazard analysis. One hour rec. and four hours lab per week. Pr.: PHYS 214; GEOL 640; GEOL 644.

**GERON 605. Practicum in Gerontology.** (1-3) I, II. Supervised field experience in an aging-related setting as a practical application of gerontological knowledge and skills. Pr.: Consent of instructor.

**HORT 970. Topics in Horticultural Therapy.** (V) I, II, S. Discussion and lectures on important papers and contributions in horticultural therapy. Pr.: Permission of instructor.

**KIN 607. Muscle Exercise Physiology.** (3) II. Subcellular, cellular and tissue structure of skeletal muscle and the relationship of these structural characteristics to the functioning of the muscle. Examines energy pathways available to the muscle to support the various functions, mechanisms underlying changes in exercise tolerance that accompany exercise training and detraining, and diseases that affect skeletal muscle. Pr.: KIN 250, KIN 335.

**MUSIC 660. Marching Band Techniques.** (2) I, S. Philosophical and practical purposes of the marching band, and the skills necessary to design, organize, instruct, and evaluate a marching band show. Pr.: MUSIC 512.

**MUSIC 665. Jazz Techniques.** (2) II, S. Basic practices found in jazz education, including literature, teaching techniques, and resource materials. Pr.: MUSIC 512.

**MUSIC 680. Advanced Rehearsal Techniques.** (2) II, S. Explore, evaluate, and develop the musical understanding and skills necessary in leading instrumental ensembles toward significant musical expression through effective rehearsal techniques. Pr.: MUSIC 417.

**MUSIC 707. History of Wind Bands.** (3) II, S. Development of the wind band medium from the Renaissance to the present, with focus on the composers and literature. Pr.: MUSIC 407.

**PLPTH 676. Fusarium Laboratory Workshop.** (1) S. A one-week laboratory/lecture course on the identification, systematics, physiology, mycotoxicology, genetics and molecular biology of fungi in the genus *Fusarium*. Students should not be enrolled in any other class while attending this workshop. Pr.: BIOL 455 or BIOL 604, and consent of the instructor.

**PLPTH 880. Plant Molecular Biology.** (3) II in even-numbered years. Study of plant genes and genome organization, plant gene expression and regulation, and functional analysis of plant genes. Three hours lecture per week. Pr.: BIOCH 521, PLPTH 505 or BIOL 541.

**PSYCH 809. Applied Research Methods II.** (3) S. Provides students with a detailed knowledge of human resource management research methods and analyses. Focuses on how to plan and conduct research in industrial/organizational psychology. Preparation for the M.S. practicum. Pr.: PSYCH 808.

**THTRE 770. Creative Arts Therapies.** (3) S. Survey of five creative arts therapy modalities: drama/ psychodrama, art, poetry/bibliotherapy, music, and dance/movement. Instruction in theory and hands-on experience with each modality, as well as reading, discussion and methods for using modalities interdisciplinarily.

#### 5. **Graduate Student Affairs Committee**

This committee has been working on two items. Postdoctoral issues are still being considered. The student grievance procedures have been sent to the University Attorney's office for review.

#### 6. **Graduate School Committee on Planning**

There are no action items at this time. Chapter 3 (The Doctoral Degree) of the *Graduate Handbook* is under review.

#### 7. **Graduate Student Council Information**

At the GSC meeting on December 4, 2000, 18 travel grant requests totaling \$1,070 were approved; five requests were rejected because there were more than two requests for a department. They approved the recommendation to fund two new graduate groups - TRIO Graduate Student Support and the Music Graduate Student's Organization.

**8. University Research and Scholarship**

There are three finalists are identified for the Associate Vice Provost of Research position. The announcement of public presentations will be sent out via the listserv.

**9. Other business**

The Digital Theses/Dissertations article from *The Communicator* was briefly discussed.

Summary information for the results of a GTA supplemental survey done at KU were presented. A similar survey will be done at K-State and Wichita State after the first of the year in 2001. A compilation of this data from the three universities will be presented to the Board of Regents and the state legislature as an area that needs to be considered, along with the tuition remission for GRAs, etc.

Council was adjourned at 3:59 p.m.