Thursday August 26, 2010	Graduate Curriculum Committee	3:45 p.m. Law Library 4th Floor

REPORT

Present: Sibyl Marshall (Chair), Ed Caudill, Pat Freeland, John Ma, Gregory Petty, Jeff, Phillips, Colin Spaulding, Scott Wall, Catherine Cox, Michael Essington, Cheryl Norris, Kay Reed, Greg Tipps. Representatives from programs present: Don Cox, Tom George, Don Hodges, Jan Lee, Catherine Luther, Bill Nugent, Masood Parang, Lee Riedinger, Lloyd Rinehart.

The meeting was called to order by Sibyl Marshall, Chair, at 3:45 p.m.

The committee approved for recommendation to Graduate Council the following curricular changes from the colleges.

College of Arts and Sciences – course changes from nine academic departments.

College of Social Work – adding of two courses and revision to PhD program concerning course requirements.

Intercollegiate – Comparative and Experimental Medicine – adding two courses.

Intercollegiate – Center for Interdisciplinary Research and Graduate Education (CIRE) – add new department (center), major of Energy Science and Engineering, and PhD degree. Add new courses and catalog text for the program.

Information Item:

Banner-Related Changes to *2010-11 Graduate Catalog* – Cheryl Norris presented information on course restrictions in the Banner Student Information System. Catherine Cox distributed charts to each of the colleges that outline how courses will be enforced in Banner and documented in the catalog. Any prerequisites and corequisites enforced in Banner will carry an (RE) designation; those not enforced in Banner will carry a (DE) designation. Registration restrictions and registration permissions will be enforced in Banner. Comments and recommended background will not be enforced. The chart for Banner Enforcement of Graduate Courses is available here.

▲ **Indicates Department, Major, Degree, Academic Discipline being added**.

COLLEGE OF ARTS AND SCIENCES

All changes effective fall 2011

I. COURSE CHANGES

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

(188) (BCMB) Biochemistry and Cellular and Molecular Biology

ADD SECONDARY CROSS-LISTED COURSE

BCMB 598 Biology Education: Theory and Practice (3)
Cross-listed: (See Ecology and Evolutionary Biology 598)

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

(424) (GEOL) GEOLOGY

ADD

GEOL 548 Sequence Stratigraphy (3) Theoretical and practical understanding of stratigraphic sequences generated by eustatic sea level change; identification parasequences, parasequence sets, and critical surfaces using the rock record integrated with subsurface geophysical data. Weekly class exercises and field trips support lecture and discussion.
Contact Hour Distribution: 3 lecture/discussion hours per week and 2 weekend field trips.
Recommended Background: Sedimentary Geology, Stratigraphy.

GEOL 690 Seminar in Earth and Environmental Science (3) Variable topics.
Repeatability: May be repeated. Maximum 9 hours.
Registration Permission: Consent of Instructor.

DROP

GEOL 695 Seminar in Planetary Sciences 3

REVISE RECOMMENDED BACKGROUND

GEOL 551 Planetary Geomorphology (3)
Recommended Background: Geomorphology, Planetary Geology, or consent of instructor.

REVISE DESCRIPTION, CONTACT HOUR DISTRIBUTION, AND RECOMMENDED BACKGROUND

GEOL 560 Principles of Geochemistry (4) Survey of fundamental geochemical principles as applied to sedimentary minerals, organic matter, and natural waters, with focus on conditions of weathering, deposition, diagenesis, and hydrothermal alteration in lacustrine and oceanic environments. Topics include activity-concentration relations, mineral solubility and stability, chemical speciation and redox state of natural waters, organic geochemistry, stable isotopes, and the geochemical signatures of depositional and post environments. Course will emphasize geochemical modeling to test hypotheses, explore assumptions, approximations, and equilibria in natural geochemical systems.
Contact Hour Distribution: 3 hours lecture and one 2-hour tutorial.
Recommended Background: General Chemistry, Mineralogy, Sedimentology and Stratigraphy, or consent of instructor.

REVISE TO ADD CREDIT RESTRICTION

GEOL 561 Organic Geochemistry (3)
Credit Restriction: Students cannot receive credit for both 461 and 561.

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

(278) (EEB) Ecology and Evolutionary Biology

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT AND CROSS-LIST (SECONDARY COURSE)

EEB 454 Animal Communication (3)
Cross-listed: (See Psychology 454.)

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

EEB 464 Macroevolution (3) History of life, phylogenetics, trait evolution, levels of selection, speciation and extinction, coevolution, taphonomy, astrobiology.
Recommended Background: Biology 240.

ADD PRIMARY COURSE AND CROSS-LIST

EEB 598 Biology Education: Theory and Practice (3) Develops the knowledge, skills, and confidence to be an effective biology teacher at the college level. Outcomes of the course will include a knowledge of teaching techniques, practice evaluating the teaching of others, putting educational theory into practice, and a completed teaching philosophy statement.
Cross-listed: (Same as Biochemistry and Cellular and Molecular Biology 598 and Microbiology 598.)

INTERDISCIPLINARY PROGRAMS

(674) Medieval Studies

REVISE TITLE, DESCRIPTION, AND ADD REPEATABILITY (SECONDARY COURSE)

MDST 410 Topics in Medieval/Early Modern French Literature (3)
Cross-listed: (See French 410.)

DEPARTMENT OF MICROBIOLOGY

(684) Microbiology

ADD SECONDARY CROSS-LISTED COURSE

MICR 598 Biology Education: Theory and Practice (3)
Cross-listed: (See Ecology and Evolutionary Biology 598.)

REVISE HOURS AND REPEATABILITY

MICR 593 Independent Study (1-15)
Repeatability: May be repeated. Maximum 15 hours.

DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

(405) French

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

FREN 450 Special Topics (3) Selected topics in French Studies.
Recommended Background: 353.
Repeatability: May be repeated if topic differs. Maximum 9 hours.

DROP

FREN 412 French Literature of the 17th Century (3)

FREN 414 French Literature of the 19th Century (3)

REVISE TITLE, DESCRIPTION, AND ADD REPEATABILITY (PRIMARY COURSE)

FREN 410 Topics in Medieval/Early Modern French Literature (3) Close reading and analysis of literary texts from the Medieval/early modern periods.
Cross-listed: (Same as Medieval Studies 410.)
Repeatability: May be repeated if topic differs. Maximum 6 hours.

REVISE TITLE, DESCRIPTION, AND ADD REPEATABILITY

FREN 415 Topics in Modern French and Francophone Literature (3) Close reading and analysis of modern and contemporary literary texts in French.
Repeatability: May be repeated if topic differs. Maximum 6 hours.

REVISE DESCRIPTION

FREN 431 Highlights of French Civilization (3) Survey of French civilization from the Gauls to World War II.
Recommended Background: 300-level literature course.

REVISE RECOMMENDED BACKGROUND

FREN 432 Contemporary French Culture (3)
Recommended Background: 353.

DEPARTMENT OF PSYCHOLOGY

(830) Psychology

ADD 400-LEVEL FOR GRADUATE CREDIT AND CROSS-LIST (PRIMARY COURSE)

PSYC 454 Animal Communication (3) Principles of communication in animals. Analyses of developmental, mechanistic, functional, and evolutionary influences on communicative signals. Information and coding, communication and social behavior, signal complexity and human language.
Cross-listed: (Same as Ecology and Evolutionary Biology 454)
Recommended Background: Animal behavior course.

ADD

PSYC 540 Nonparametric Statistics (3) Nonparametric (distribution-free) statistical analysis of data. Probability theory; analysis of contingency tables; analysis based on ranks. Basic randomization and Monte Carlo methods.

REVISE REPEATABILITY

PSYC 509 Research Practicum (1-3)
Repeatability: May be repeated. Maximum 18 hours.

DEPARTMENT OF SOCIOLOGY

(915) SOCIOLOGY

REVISE REPEATABILITY AND REQUEST PERMISSION FOR VARIABLE TITLE

SOCI 645 Advanced Studies in Political Economy (3)
Repeatability: May be repeated. Maximum 15 hours.

SOCI 655 Advanced Studies in Criminology (3)
Repeatability: May be repeated. Maximum 15 hours.

SOCI 665 Advanced Studies in Environmental Sociology (3)
Repeatability: May be repeated. Maximum 15 hours.

SOCI 675 Advanced Studies in Social Psychology (3)
Repeatability: May be repeated. Maximum 15 hours.

SOCI 695 Advanced Special Topics (3)
Repeatability: May be repeated. Maximum 15 hours.

DEPARTMENT OF THEATRE

(976) THEATRE

ADD

THEA 524 Master Class in Acting Shakespearean Text (3) Tools for the analysis and performance of Shakespearean texts. Acting monologues and scenes are required.
Repeatability: May be repeated. Maximum 6 hours.
Comments: Theatre MFA students only.

COLLEGE OF SOCIAL WORK

All changes effective fall 2011

I. COURSE CHANGES

(905) (SOWK) Social Work

ADD

603 Advanced Research (3) Required course. This advanced research methods course will focus on the development and writing of a research proposal. Students will learn advanced methods of sampling and research design. Students will develop skills at conceptualizing and formulating research questions and hypotheses; and planning sampling procedures, a research design, and data analysis procedures that are consistent with and appropriate for specific research questions and hypotheses.

675 Teaching Methods in Social Work (3) Elective course for doctoral students in Social Work. Focuses on social work curriculum policy and curriculum issues, course development and content, teaching techniques, and classroom management. Emphasizes skill as well as conceptual content and theory. The use of important instructional technology is also covered, including the use of Blackboard.

II. PROGRAM CHANGES

(905) (SOWK) Social Work

REVISE SOCIAL WORK MAJOR, PHD

In the 2010-2011 *Graduate Catalog* under Social Work Major, PhD, revise text under Requirements Heading, 4th paragraph as follows:

Delete as a required course SOWK 640 and replace with SOWK 603. No other changes to the paragraph.

INTERCOLLEGIATE

COMPARATIVE AND EXPERIMENTAL MEDICINE

All changes effective fall 2011

I. COURSE CHANGES

(261) Comparative and Experimental Medicine – Veterinary Medicine

ADD

601 Advanced Epidemiology (3) Epidemiological study design, data analysis, and model building. Emphasis placed on using, understanding, and making inferences based on least squares, logistic Poisson, survival, and mixed models. STATA will be used as the basic computing language for all analyses.
Recommended Background: Graduate-level epidemiology and statistics courses.
Comment(s): Consent of instructor is required.

617 Journal Club in Comparative Medicine (1) Readings and discussions based on current literature.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 12 hours.

INTERCOLLEGIATE

CENTER FOR INTERDISCIPLINARY RESEARCH AND GRADUATE EDUCATION (CIRE)

All changes effective Fall 2011

▲ ADD NEW DEPARTMENT, MAJOR, AND DEGREE (CIRE / 218)

▲ ADD NEW ACADEMIC DISCIPLINE AND SUBJECT CODE (324 / ESE)

I.COURSE CHANGES

▲ ADD NEW ACADEMIC DISCIPLINE, SUBJECT CODE AND COURSES

(324) (ESE) Energy Science and Engineering

ESE 502 Registration For Use of Facilities (1-15) Required for the student not otherwise registered during any semester when student uses university facilities and/or faculty time before degree is completed.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated.
Credit Restriction: May not be used toward degree requirements.
Registration Restriction: Minimum student level – graduate.

ESE 511 Introduction to Energy Science and Technology I (3) Topics include: Energy basics, history of energy and society, current and future supply and demand, political and environmental aspects of energy production, energy technologies (fossil fuels, biomass, nuclear fission, nuclear fusion, solar, wind, geothermal), energy conversion, storage, transportation, and distribution, energy efficiency, and innovation.

ESE 512 Introduction to Energy Science and Technology II (3) Topics include: Energy basics, history of energy and society, current and future supply and demand, political and environmental aspects of energy production, energy technologies (fossil fuels, biomass, nuclear fission, nuclear fusion, solar, wind, geothermal), energy conversion, storage, transportation, and distribution, energy efficiency, and innovation.

ESE 593 Independent Study (1-3)
Repeatability: May be repeated. Maximum 9 hours.
Credit Restriction: Only 6 hours may be applied toward degree requirements.

ESE 599 Seminar (1)
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 15 hours.
Credit Restriction: Only 3 hours may be applied toward degree requirements.

ESE 600 Doctoral Research and Dissertation (3-15)
Grading Restriction: P/NP grading only.
Repeatability: May be repeated.

ADD AND REQUEST VARIABLE TITLE

ESE 597 Special Topics (1-3)
Repeatability: May be repeated. Maximum 9 hours.

ESE 697 Special Topics (1-3)
Repeatability: May be repeated. Maximum 9 hours.

Rationale: A new interdisciplinary doctorate degree in Energy Science and Engineering (ESE) is proposed, to educate students in energy-related fields that are increasing in importance to the state and the country. Faculty formed from current researchers at the University of Tennessee Knoxville and Oak Ridge National Laboratory provide research opportunities in various fields relating to the scientific and engineering challenges in energy supply and usage, including impacts on the environment and climate. A few new courses are proposed at the 500- and 600- levels, while existing 500- and 600-level courses in various departments are utilized to provide the course component of the PhD, different depending on the specific area of specialization of the ESE student. This is a program that was initiated by Governor Bredesen and funded by the State Legislature. This degree will be administered by the newly created Center for Interdisciplinary Research and Graduate Education (CIRE), which has been established by UTK and Oak Ridge National Laboratory.

II.PROGRAM CHANGES

▲ ADD NEW MAJOR AND DEGREE

ENERGY SCIENCE AND ENGINEERING, PHD *(PENDING THEC APPROVAL)*

Energy Science and Engineering, PhD*

**This program is pending approval from the Tennessee Higher Education Commission. Students will be admitted to the major should the program be approved.*

A graduate program is offered leading to the Doctor of Philosophy (PhD) degree in Energy Science and Engineering (ESE). This interdisciplinary degree is a collaborative effort supported by selected faculty in the College of Arts and Sciences, the College of Agricultural Sciences and Natural Resources, and the College of Engineering, in addition to research staff of Oak Ridge National Laboratory. These research and educational leaders are appointed as faculty members of the Center for Interdisciplinary Research and Graduate Education (CIRE). Members of the CIRE faculty determine the curriculum and serve as the primary resource for the teaching, research, and mentoring of the students admitted to the program. The CIRE Graduate Education Committee makes decisions on admissions, transfer, evaluation, and continuation of graduate students in the program.

Admission Requirements

In order to be admitted to the PhD program in energy science and engineering, student applicants must fulfill the general admission criteria for the Graduate School of the University of Tennessee Knoxville. In addition, the student must have a Bachelor of Science degree in either engineering or a scientific field (physics, chemistry, biology, mathematics, computational science, etc.), or the equivalent. Students with other undergraduate degrees may also be admitted on a case-by-case basis by the CIRE Graduate Coordinating Committee. Dependent on the student's background, additional coursework may be required to satisfy co- and prerequisites.

Requirements

A minimum of 72 hours is required beyond the bachelor's degree, exclusive of credit for an MS thesis, and completion of the core requirements, as outlined in the section on Course Requirements. Of this number, a minimum of 24 and up to 36 hours of 600 Doctoral Research and Dissertation and six hours of 600-level coursework at UTK will be required.

No later than one year after entering the program, each student must take a qualifying examination. A student must pass the qualifying examination to proceed in the PhD program.

No later than the end of the second year following entrance into the PhD program, each student must take and pass a comprehensive examination that includes presentation and approval of the proposed dissertation research. After passing the comprehensive exam, the student should submit the Admission to Candidacy Application to the Graduate School. Admission to candidacy indicates that the student has demonstrated the ability to do acceptable work in the area of study and has made satisfactory progress toward the degree. This action usually connotes that all prerequisites to admission have been completed and the program of study/research has been approved (see details in a later section).

After completion of the dissertation, prior to graduation, each student must pass a dissertation defense examination administered by the student's doctoral committee.

Course Requirements

Out of the 72 hours required for the program, 36 hours of coursework is required beyond the BS degree. Of these, the following 30 hours of coursework or their equivalent must be completed at a minimum, including the Core Curriculum, a Knowledge Breadth Curriculum**,** a Knowledge Specialization Curriculum, and Seminar Series**,** as summarized below.

A. Core Curriculum (6 credits)

ESE 511 and ESE 512 Introduction to Energy Science and Technology (3, 3)

B. Knowledge Breadth Curriculum (6 Credits): select two courses from the three following areas
Political, social, legal, ethical and security issues related to energy (3-4 courses, each 3 credits)
Entrepreneurship, leadership, and management (3-4 courses, each 3 credits).
Environmental and climate sciences related to energy (3-4 courses, each 3 credits)

C. Knowledge Specialization Curriculum (15 Credits)
Choose five courses from participating department as defined in the CIRE Graduate Student Handbook.
Nuclear energy
Bioenergy and biofuels
Renewable energy
Energy conversion and storage
Distributed energy and grid management
Environmental and climate sciences related to energy

D. ESE 599 Seminar (3 credits; 1+1+1)

Faculty Committee

Advisor/Major Professor

Each graduate student must have an advisor/major professor. This professor advises the student about course selection, supervises the student's research, and facilitates communication within the degree program and/or student's major department, to other departments, and with the Graduate School relative to requirements. A temporary advisor may be assigned to direct the entering student's work during the period in which the student is becoming acquainted with the institutions and determining the focus of research interests. Once the major professor is determined, the major professor and the student together select a doctoral committee. The student is expected to maintain close consultation with the major professor and other members of the graduate committee with regard to progress in the program.

Doctoral Committee

The major professor directs the student's dissertation research and chairs the doctoral committee. The student and major professor identify a doctoral committee composed of at least four faculty members holding the rank of assistant professor or above, three of whom, including the chair, must be approved by the Graduate Council to direct doctoral research. At least one member must be outside the CIRE faculty. Committee members should be chosen to insure multidisciplinary breadth. The Center Director has oversight responsibility to insure the multidisciplinary nature of the committee. A doctoral student, in collaboration with the major professor, should begin to form the doctoral committee during the first year of study. Once formed, the doctoral committee, by request of the major professor, will meet annually, at the minimum, with the student to insure timely progress toward the degree.

Admission to Candidacy

Admission to candidacy indicates that the student has demonstrated ability to do acceptable graduate work and that satisfactory progress has been made toward the degree. This action usually connotes that all prerequisites to admission have been completed and a program of study has been approved.

A student may be admitted to candidacy for the doctoral degree after passing the comprehensive examination and maintaining at least a B average in all graduate coursework. Each student is responsible for filing the Admission to Candidacy form, which lists all graduate courses to be used for the degree, including courses taken at the University of Tennessee or at other institutions prior to admission to the doctoral program. The Admission to Candidacy form is signed by the doctoral committee.

Graduate Student Examinations

This section provides a description of the graduate student examination requirements for the PhD degree program. Three examinations are required as part of the doctoral program: qualifying examination, comprehensive examination, and defense of dissertation examination.

Qualifying Examination

The qualifying examination is developed, administered, and graded by the faculty (or designated subset of the faculty) of the PhD program under the coordination of the CIRE Director and tests the student's general knowledge related to the course requirements. In case of failure, the candidate may appeal to retake the examination through the CIRE Graduate Education Committee within 30 days of notification of the result. If the appeal is granted, the student must retake the examination at the next offering. The result of the second examination is final.

Comprehensive Examination

Timing. The Comprehensive Examination must be taken no later than the end of the second year following entrance into the PhD program and prior to admission to candidacy. The timing is late enough in a student's academic program to permit most of his/her graduate course work to be covered on the examination, and early enough to permit modification of the student's program based on the results of the exam.

Prerequisites for the exam. Two requirements must be satisfied before a student takes the Comprehensive Examination.

A written Dissertation Proposal, approved by the major professor, must be submitted to each member of the student's Doctoral Committee two weeks prior to the examination.
Each member of the student's Doctoral committee must agree that the student is ready to take the Comprehensive Exam. In order to satisfy each member of the committee that he/she is ready for the exam, the student may be required to perform satisfactorily on either written or oral tests as prescribed by the committee member. The committee member will communicate to the major professor when they are satisfied that the student is ready to take the Comprehensive Exam.

Format. The Comprehensive Examination will consist of two parts:

A one-day to two-day open book written examination will be given at an agreed upon date. This exam will be composed by the members of the Doctoral Committee at the request of the student's major professor, and the exam will be administered by the major professor.
Approximately three to six weeks after the written examination, the student will be required to defend his/her dissertation research proposal to the committee. An oral examination will be given. In addition, the student may be further examined in an oral examination on subject matter similar to that covered on the written exam.

Once the Comprehensive Examination is passed, the student should file for and be admitted to candidacy. At the discretion of the Doctoral Committee, supplemental reexaminations for the Comprehensive Examination and/or proposed dissertation research may be required. In case of failure, the candidate may not apply for reexamination until the following semester. The result of the second examination is final.

Defense of Dissertation Examination

A doctoral candidate must pass an oral examination on the dissertation. The dissertation, in the form approved by the major professor, must be distributed to the committee at least two weeks before the examination. The examination must be scheduled through the Office of the University Registrar at least one week prior to the examination and must be conducted in university-approved facilities. The examination is announced publicly and is open to all students and faculty members. The defense of dissertation will be administered by all members of the doctoral committee after completion of the dissertation and all course requirements. This examination must be passed at least two weeks before the date of submission and acceptance of the dissertation by Graduate Student Services. The major professor must submit the results of the defense by the dissertation deadline.

THE UNIVERSITY of TENNESSEE KNOXVILLE

Office of the Chancellor
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MEMORANDUM

Date: February 16, 2010

To: Kelly Beierschmitt
Robert Daverman
Wayne Davis
Carolyn Hodges (ex officio)
Martin Keller
Bamin Khomami
Yilu Liu
Alex Miller
Jeff Nichols
Masood Parang
Jim Roberto
Soren Sorenson
Neal Stewart

From: Thomas Mason and Jimmy G. Cheek

Re: Task Force to create and implement the UTK ORNL Center for Interdisciplinary Research and Graduate Education (CIRE)

As you know, Governor Bredesen recently announced a transformational plan to accelerate graduate education and research at UTK and ORNL. This will build on the long standing partnership that currently exists between these two institutions. Legislation was recently passed to create a new world class graduate interdisciplinary degree program between UTK and ORNL and establishment of the Center for Interdisciplinary Research and Graduate Education (CIRE). The practical effect of this plan is to dramatically heighten levels of teaching and learning occurring at one of America's premier universities and one of its premiere national laboratories.

Thank you for agreeing to serve as a member of the task force to develop plans for this important program. Wayne Davis and Jim Roberto have agreed to serve as co-chairs of this task force and implementation team.

It is urgent that we move rapidly to plan, create and implement the programs within the CIRE. The charge for the task force is as follows:

- To create and secure approval for an interdisciplinary Ph.D. program in energy sciences and engineering. The task force may want to consider concentration, minor, entrepreneurial courses and other innovations that could expand and enrich the degree program. We request that this proposal be completed and approved by UTK, the UT System, the UT Board of Trustees, and THEC in late 2010 and that we admit our first class of students by fall of 2011.
- To conceive, create and secure approval for a center at the University of Tennessee, Knoxville, to be known as the UTK-ORNL Center for Interdisciplinary Research and Graduate Education (CIRE). We request that the co-chairs function with the authority of the eventual director. We also request that a vetting process for some faculty be established

and implemented for CIRE with the goal of getting some CIRE faculty in place by September 2010.

- To create a position description for the Director of the UTK-ORNL CIRE and provide it to the Chancellor of UTK and the Director of Oak Ridge National Laboratory so that a search may be launched for the Center Director. We request that this be done by April 2010.
- To create and secure approval of the operational procedures and policies of the UTK-ORNL CIRE.

We will attend the first meeting to provide the charge for the task force and answer any questions that you may have. In addition, we ask that the co-chairs report to us on a periodic basis regarding progress toward achieving the above mentioned objectives.

It is important that we move this project forward with dispatch, and therefore we ask that the task force work expeditiously in accomplishing its mission. If additional resources are needed, or if personnel are needed to help expedite the processes, let us know.

The CIRE and the interdisciplinary Ph.D. program are critical to the further development of the relationship between the University of Tennessee, Knoxville and Oak Ridge National Laboratory and their impact across the state of Tennessee. In addition, it is essential that we show good faith in expediting the development of these plans since a significant amount of venture capital has been allocated by the state.

You have the opportunity as members on this task force to create a center that will further enhance the relationship between Oak Ridge National Laboratory and the University of Tennessee, Knoxville. Your work is critical to the further development of this relationship. Thank you for participating.

Should you have questions or comments, please feel free to contact us.

cc: Deans
Vice Chancellors
Toby Boulet
Bruce Bursten
Joe DiPietro
Hank Dye
Anthony Haynes
Joan Heminway
John Nolt
Jan Simek
Billy Stair
Thomas Zacharia

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April 21, 2010

To: Bonnie Lee Yegidis
Vice President for Academic Affairs and Student Success
825C Andy Holt Tower

From: Carolyn R. Hodges
Vice Provost and Dean of the Graduate School

Re: Intent-to-Plan Notification
Interdisciplinary Program in Energy Sciences

Attached you will find a memo from Chancellor Cheek charging a task force to create and implement the UTK/ORNL Center for Interdisciplinary Research and Graduate Education (CIRE) and a new interdisciplinary PhD program in energy sciences and engineering. The charge in the memo, which indicates the intent to plan the graduate degree, outlines the following:

The nature, purpose, and scope of the intended degree

- In January 2010, with the strong support and urging of Governor Bredesen, the State of Tennessee passed legislation authorizing development of a graduate interdisciplinary doctoral degree and establishment of a Center for Interdisciplinary Research and Graduate Education (CIRE), both of which would build on the partnership between the University of Tennessee at Knoxville (UTK) and Oak Ridge National Laboratory (ORNL).

- The degree and research associated with the Center will dramatically enhance graduate education and research at UTK and enrich opportunities for teaching and learning shared by UTK and ORNL.

The expected date of the degree proposal submission – UT Board of Trustees, June 2011; THEC, July 2011

The intended implementation date – Admission of the first class of students in fall 2011

Source of funding – Venture capital has been allocated by the state for startup of the degree; doctoral program planning and implementation will be absorbed within the existing structures, and future research grants and contracts will allow the program to be self-sustaining.

I sit as an ex-officio member of the task force and would appreciate your sending confirmation of approval to me, since the completed new program proposal will be sent to the Graduate Council. Thank you.

RICHARD G. RHODA
Executive Director

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PHIL BREDESEN
Governor

MEMORANDUM

TO: Dr. Jan Simek
Interim President, University of Tennessee

FROM: Richard Rhoda

SUBJECT: Approval of Letter of Intent to Plan: Ph.D. in Energy Sciences and Engineering by the University of Tennessee Knoxville

DATE: May 19, 2010

In accordance with THEC policies, colleges and universities are required to submit Letters of Intent for authorization to proceed with developing proposals for new academic programs and units. The THEC financial projection form for the proposed program must accompany the letter of intent to plan. Upon THEC approval to proceed with developing proposals, institutions should do so in a manner consistent with THEC policies and criteria. Proposals must document relevance to the institution's mission, provide enrollment and financial projections, describe the anticipated evaluation process, document employer and student demand, and certify that the proposed program will not unnecessarily duplicate existing offerings at other Tennessee institutions. The proposal must ensure faculty sufficiency, adequacy of library and space, and existence of student support resources.

The University of Tennessee Knoxville has requested THEC approval of intent to plan a Ph.D. in Energy Sciences and Engineering. In UTK's requesting and my approving the planning intent, both the University and THEC are following normal program review policy protocols for the development of the graduate program as authorized in the Tennessee Complete College Act of 2010. It is understood that the doctoral program will be developed by faculty in the Colleges of Arts and Sciences, Agricultural Sciences, and Engineering and in collaboration with the faculty and research staff of the Oak Ridge National Laboratory. The state of Tennessee has appropriated start-up funds for this initiative aimed at research enhancement, with the anticipation that recurring costs will be met through research funding. As indicated in the letter of intent to plan, UTK anticipates admission of a first class of students in fall, 2011.

Cc: Chancellor Cheek, UTK
Vice President Yegidis, UT
Vice Provost Hodges, UTK
Dr. Linda Doran, THEC

Banner-Related Changes to *2010-11 Graduate Catalog*

Several changes to the course descriptions section of the catalog are needed so that the catalog more accurately reflects what is programmed in Banner. This will make it easier to assist students who encounter prerequisite blocks or other restrictions and have questions. All catalog changes are highlighted on the chart in yellow. If you have questions, please contact Catherine Cox in the Graduate School at 974-1471.

Changes include:

- **Adding a registration restriction to all law courses**
  - Institutional policy dictates that law courses are only open to law students (unless special permission is granted by the College of Law). To enforce this policy in Banner, a level restriction had to be added to all law courses (otherwise, any student would be able to register for any law course as long as he/she met any course prerequisites/corequisites). Because the restriction exists in Banner, we want the restriction documented in the catalog.
- **Adding a registration restriction to all vet med courses**
  - Institutional policy dictates that vet med courses are only open to vet med students (unless special permission is granted by the College of Veterinary Medicine). To enforce this policy in Banner, a level restriction had to be added to all vet med courses (otherwise, any student would be able to register for any vet med course as long as he/she met any course prerequisites/corequisites). Because the restriction exists in Banner, we want the restriction documented in the catalog.
- **Adding a registration restriction to all grad credit only 500-level courses**
  - Institutional policy dictates that 500-level courses can be taken by undergraduate students for undergraduate credit; however, if a student wants to take the course for graduate credit, special permission from the Graduate School is required. To enforce this policy in Banner, a restriction had to be added to all 500-level courses that are only available for grad credit (otherwise, undergraduate students would be able to register for graduate credit without the Graduate School's permission). Because the restriction exists in Banner, we want the restriction documented in the catalog.
- **Adding a registration restriction to all 600-level courses**
  - Institutional policy dictates that 600-level courses can only be taken by graduate students. To enforce this policy in Banner, a restriction had to be added to all 600-level courses (otherwise, undergraduate students would be able to register for any 600-level course as long as he/she met any course prerequisites/corequisites). Because the restriction exists in Banner, we want the restriction documented in the catalog.
- **Enforcing undergrad prerequisites/corequisites on 400-level courses available for grad credit**
  - Despite extensive study and testing of 400-level courses, we were not able to enforce one set of prerequisites for undergraduate students and a different set of prerequisites for graduate students. Therefore, only the undergraduate level prerequisites will be enforced on 400-level courses available for graduate credit. Graduate students who may have comparable credit to meet the prerequisite may request an override from the department or the Graduate School.
- **Moving all (DE) prerequisite/corequisite information to the (RE) prerequisite/corequisite field**
  - Any course prerequisites/corequisites that are enforced by Banner will appear under the (RE) prerequisite/corequisite heading which stands for "registration system enforced." Any course prerequisites/corequisites not enforced by Banner will appear under the (DE) prerequisite/corequisite heading which stands for "department enforced." (DE) prerequisites/corequisites may be enforced (or not enforced) at the discretion of the department.