Academic Council Minutes
May 16, 2012

The Academic Council met Wednesday, May 16, 2012, in the CSC Kiowa Room. Voting members in attendance were:

- Dr. Matthew Capps, Dean, West College of Education
- Dr. Rodney Cate, Interim Dean, College of Science and Mathematics
- Dr. Patti Hamilton, Interim Dean, College of Health Sciences and Human Services
- Dr. Barbara Nemecek, Dean of the Dillard College of Business Administration
- Dr. Jane Owen, Interim Dean, Graduate School
- Dr. Kathleen Roberts, Faculty Senate Vice President
- Dr. Sam Watson, Dean, Prothro-Yeager College of Humanities and Social Sciences

Absent were Dr. Ron Fischli, Dean, Lamar D. Fain College of Fine Arts; Dr. Jane Owen, Interim Dean of the Graduate School; Dr. Kathleen Roberts, Faculty Senate Vice President; and Ms. Holly Allsup, Student Government Association Vice-President

Other attendees:
- Ms. Naoma Clark, Director, Academic Success Center
- Ms. Darla Inglis, Registrar
- Dr. James Johnston, Associate Professor, Radiologic Science
- Dr. Clara Latham, University Librarian
- Ms. Barb Merkle, Director of Admissions
- Dr. Pam Morgan, Associate Vice President for Outreach and Engagement
- Mr. Matthew Park, Staff Senate Representative
- Dr. Michael Vandehey, Chair, Honors Program Chair
- Dr. Ben Velasquez, Chair, Athletic Training and Exercise Physiology
- Dr. Julie Wood, Chair of the MSU Core Curriculum Committee

Dr. Alisa White, Provost and Vice President for Academic Affairs, presided and the meeting began at 3:00 p.m.

Approval of Minutes

Dr. White called for a motion to approve the minutes of the April 2012 Academic Council meeting. There was a correction noted (see bold/highlighted area below). Dr. Hamilton made a motion to adopt the minutes with the correction; Dr. Capps seconded, and the motion was adopted. (closed)

April 18, 2012 Academic Council Minutes

Under New Business, item 2, page 4

Management

Catalog change, currently page 123 of 2010-12 catalog
Courses for Major in Management (27 semester hours)
- MGMT 3783, 4033, 4113, 4213, and 4613; plus twelve hours from the following: MGMT 4413, 4513, 4663, 4783, 4793, 4893, 4723; or one from MKTG 3763, 4303, 4643, and 4723 4753.

Degree Plan change
2012-2014 BBA with a Major in Management (on back side of degree plan, endnote 8)
Other catalog listed courses: LSBA 3243, ECON 3703 or 4643, MIS 3163, or one from MKTG 3763, 4303, 4643, and 4723.
Old Business

Dr. Julie Wood, Chair of the Core Curriculum Committee (CCC), presented additional information on the CCC Component Area Option. Dr. Capps made a motion to adopt the proposed Component Area Option; Dr. Hamilton seconded and discussion ensued. After discussion, a vote was conducted and the Component Area Option was adopted (closed).

Dr. Wood reported that all colleges were well represented by members on the CCC and they approved the adoption of the option by a majority vote. She stated that the committee had worked hard to be sure all colleges had input and collaboration between the colleges, faculty and students regarding the cross-disciplinary courses.

Questions were asked regarding the placement of courses in the core that require pre-requisites. There seems to be clarification needed in where sequential courses in a program could be adopted in the option areas. Dr. White and Dr. Wood will do further research to make sure this is clarified.

Dr. Wood also stated that another Component Area Option is being developed by a minority of members from the CCC who feel that certain areas are being hit the hardest in the adoption of the 42 hour core. That option will be presented at a later date.

Component Area Option

The Core Curriculum Committee recommends the following course requirements for all students completing the Component Area Option of the general education core at Midwestern State University. (CCC majority vote, May 14, 2012)

Students are required to complete 3 hours of course work from each of the following thematic areas, for a total of 6 semester hours.

Cultural and Global Understanding (3 hours)

Limitation: Select courses that encompass cultural diversity and living within a global society. (Course proposals considered from all disciplines.)

Outcome: Students have an opportunity to explore the theme from a broad-based perspective through survey and interdisciplinary courses.

Requirement: Courses selected must meet the requirements for one of the 8 foundational component areas and be open to all students.

Undergraduate Inquiry and Creativity (3 hours)

Limitation: Select courses that provide students, under faculty member supervision, the opportunity to create, inquire, discover, or conduct research. (Course proposals considered from all disciplines.)

Outcome: Students have an opportunity to complete a project, creative piece of work, or research study.

Requirement: Courses selected must meet the requirements for one of the 8 foundational component areas and be open to all students.
Dr. Wood also provided information on another Component Area Option that is being developed by a minority of members from the CCC who feel that certain areas are being hit the hardest in the adoption of the 42 hour core. Dr. Capps made a motion to adopt the proposed Component Area Option; Dr. Hamilton seconded and the motion was adopted (closed).

New Business

1. Dr. Hamilton made a motion to adopt the following undergraduate course change in Athletic Training and Exercise Physiology; Dr. Capps seconded and the motion was adopted (closed).

   New course addition, effective Fall 2012:
   ATRN 4123. Data Analysis
   The focus of this course is to provide an interdisciplinary data analysis course specifically for athletic training majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include but are not limited: Basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals, reliability and validity, significance, power analysis, levels of evidence, sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.
   Lecture 3(3-0)
   Course objectives
   Upon completion of this course, a student will be able to:
   - Use the measures of central tendency and measures of dispersion.
   - Use concepts of estimates, relative risk, relative risk reduction, and odds ratios.
   - Use tests that analyze frequencies, correlations, and differences.
   - Understand the basic concepts of measurement, sampling, sample size, and sample distribution.
   - Grasp the general principles of processing and presenting data.
   - Explain, calculate and interpret inferential statistics including probability and hypothesis testing.
   - Correlate the concepts of probability and the normal distribution curve.
   - Understand the factors that form the basis for hypothesis and statistical testing.
   - Apply statistical outcomes to processes of quality improvement.
   - Use statistical outcomes to evaluate effects of treatment

2. Dr. Hamilton made a motion to adopt the following undergraduate course change in Athletic Training and Exercise Physiology; Dr. Nemecek seconded and the motion was adopted (closed).

   Change of course prerequisite, effective Fall 2012
   ATRN 4903. Administration of Athletic Training
   Prerequisite(s): ATRN 3103, Co-requisite: ATRN 4801
   Prerequisite(s): Senior standing in Athletic Training major; co-requisite ATRN 4801

3. Dr. Capps made a motion to adopt the following graduate catalog changes; Dr. Hamilton seconded and the motion was adopted (closed).

   Graduate Catalog Changes – pg. 16, effective Fall 2012

   HOW TO APPLY FOR GRADUATE ADMISSION
   In order to participate in graduate level studies at Midwestern State University, a candidate must be accepted by the Graduate School and the program. The requirements for the Graduate School are listed below. Consult the specific program section of the catalog for program requirements. Please note, students may meet the Graduate School requirements for admission, but not meet the program requirements. Prospective students are encouraged to contact the Office of the Graduate School and visit our website
Applicants for graduate or post-baccalaureate classification (including students who have completed their undergraduate degree at Midwestern State University) must complete the following steps:

**Application for Graduate Admission:** Midwestern State has a graduate application processing fee of (U.S.) $35.00. Students may apply online via ApplyTexas at [https://www.applytexas.org](https://www.applytexas.org) or at [http://www.mwsu.edu](http://www.mwsu.edu). Applications may be submitted online through ApplyTexas by the following dates:

Application deadlines:
- Fall - August 7
- Spring - December 15
- Summer I - May 15
- Summer II - June 15

Students who have previously attended Midwestern State as a graduate student, but did not enroll for fall or spring term, must reactivate their files by completing a reactivation form. If a graduate student has not attended MSU for a year or more, a new application is required, with an application processing fee of $10.00-
$35.00. All late applications are subject to approval by the Graduate Dean. If an applicant cannot be admitted and registered for the term submitted on the application, a new application and application fee may be required for subsequent semesters.

4. Dr. Capps made a motion to adopt the following graduate course change in Athletic Training and Exercise Physiology; *Dr. Watson seconded and the motion was adopted (closed).*

**Note:** Dr. White recommended that the majority of the information listed below should go in a program handbook specific to EXPH graduate students and not be listed in the graduate catalog. Dr. Velasquez agreed with the recommendation. He will work with his college, the Registrar, and the Graduate School to make the appropriate changes.

**Graduate Catalog (Exercise Physiology) Changes, effective Fall 2012**

**THE MASTER OF SCIENCE IN EXERCISE PHYSIOLOGY**
The Master of Science in Exercise Physiology prepares students for a number of careers in exercise science and related fields.

**MISSION STATEMENT**
The goal of the graduate program in Exercise Physiology is to encourage critical and reflective thinking in students and enable them to synthesize the knowledge and skills necessary to apply the principles of human movement in a variety of community, research, clinical, or athletic settings, or to pursue advanced study at the doctoral level.

**Requirements for completion of a Master of Science in Exercise Physiology**

### Thesis Option (30 semester hours):
- **EXPH 5003** Research and Design
- **EXPH 5013** Applied Research Statistics
- **EXPH 5023** Applied Exercise Physiology & Assessment
- **EXPH 5063** Seminar in Exercise Physiology
- **EXPH 5083** The Science Behind Injury & Rehabilitation
- **EXPH 5093** Advanced Exercise Physiology
- **EXPH 6103** Independent Study: Research I
- **EXPH 6113** Independent Study: Research II
- **EXPH 6983** Thesis I
- **EXPH 6993** Thesis II

### Non-Thesis Option (36 semester hours):
- **EXPH 5003** Research & Design
- **EXPH 5013** Applied Research Statistics
Graduate Admissions and Requirements
An application for admission to the Midwestern State University Graduate Program is available on the website at [http://www.mwsu.edu](http://www.mwsu.edu). Paper copies of the application are available through the Office of the Graduate School.

Students seeking admission to graduate programs in the College of Health Sciences and Human Services must meet University requirements (see pages ●) and College of Health Sciences and Human Services and Athletic Training and Exercise Physiology requirements.

The Master of Science in Exercise Physiology offers two options for completion of the degree. Students may select either the Thesis option or the Non-Thesis option.

**Thesis Option**
Each candidate is required to select a thesis and complete an original research project on a topic approved by his/her major professor and thesis committee, prepare a written report of the research, defend the research at a public forum, and place a copy of the paper on file as directed by the University. The thesis must follow either the *Publication Manual of the American Psychological Association* or the American Physiological Society format. Library research papers may be filed on standard typing paper. Theses must be submitted on 20 lb. cotton bond paper.

**Thesis Option: Oral Defense Requirement**
Coincident with the public presentation of a thesis, the candidate will be required to complete an oral defense administered by the candidate's graduate committee. The defense will focus on the thesis research.

**Timeline for Oral Defense**: The Oral Defense will be scheduled during the two weeks prior to the last day of classes for the respective semester.

**Non-Thesis Option: Comprehensive Examination**

**Introduction**: As a culminating experience in completion of the Master of Science in Exercise Physiology, students will be required to pass a comprehensive exam. The exam will consist of questions from the content from each course within the Core Curriculum as provided, and graded, by the course instructor.

**Format**: The Comprehensive Exam will be in written format, and students will be required to bring bluebooks in order to sit for the exam (one bluebook per class in the core curriculum).

*Note: Dr. White recommended that the majority of the Format information listed below should go in a program handbook specific to EXPH graduate students and not be listed in the graduate catalog. Dr. Velasquez agreed with the recommendation. He will work with his college, the Registrar, and the Graduate School to make the appropriate changes.*

Each question will be graded by the instructor of record for the Core Curriculum courses on a ten point scale. Students must score seven points or above to pass the question. Students will have six hours to write their entire exam. All content from the courses within Core Curriculum may be used by instructors to construct exam questions.

Students who pass all questions with a score of seven out of ten or above will be allowed to graduate providing they have completed all other degree and university requirements. For any question that a
student does not pass, a second attempt will be allowed within two weeks of the first exam attempt. Students will only be required to re-take the parts of the exam which were failed in the first attempt. As with the first attempt, all course content is open for question material, and students should not expect to see the same questions or even the same content in their second attempt. Questions from the second attempt will be graded on the same scale and to the same standard as in the first attempt.

Students who successfully pass their second written attempt with a score of seven out of ten or above, as graded by the instructor of record for the course, will be allowed to graduate providing they have completed all other degree and university requirements. A student who fails a second attempt at a given question will be required to sit for an oral defense of their knowledge of course content in front of a panel consisting of all members of the graduate faculty in the Exercise Physiology program. This defense must occur within one week of the second written attempt. As with the first two attempts, all material covered in the courses for which the student is testing is available for members of the panel to draw questions from. Once questions have been asked and answered, the student will be dismissed from the room and faculty on the panel will vote. For the knowledge defense to be successful, a majority of the faculty must agree to pass the student.

Students who successfully pass their oral defense will be allowed to graduate providing they have completed all other degree and university requirements. In the event of a tie vote, or if a majority of the faculty panel do not think that the student has successfully demonstrated knowledge of requisite course content, the student will be required to retake the corresponding class or classes. Students should be aware that not all classes in the program are offered every semester or even every academic year; so not passing the oral defense could lead to significant delays in their graduation date. The retaking of courses is part of the comprehensive exam process. Thus, a different standard in terms of grade exists for successful completion as compared to taking a course under the normal process of degree completion. Successful completion of the exam will be demonstrated by earning a grade of B or above in the course retake. Students who earn a B or above will be allowed to graduate providing they have completed all other degree and university requirements. Students who are required to take a course for a second time as a result of unacceptable performance on the oral defense and who earn a C or below will have failed the final step in the comprehensive exam process, will not be allowed to graduate, and will be removed from the program.

Timeline for Comprehensive Examination: Graduate faculty will announce the date/time for the Comprehensive Written Exam. Comprehensive Exams will only be conducted during the Fall or Spring Semesters. Exams will be scheduled during the six weeks prior to the last day of classes for the respective semester.

If a student needs a 2nd attempt on the Written Comprehensive Exam, the student will meet with the faculty advisor to schedule a time/date. Second attempt exams will be scheduled during the four weeks prior to the last day of classes for the respective semester.

The Graduate Advisory Committee and Admission to Candidacy
Prior to the end of the first year of graduate study, the candidate must recruit a committee to be composed of three members of the Athletic Training and Exercise Physiology graduate faculty or two members of the Athletic Training and Exercise Physiology graduate faculty and one member of the minor field's graduate faculty. Of this group, one member of the Athletic Training and Exercise Physiology graduate faculty will serve as the student's major professor, advisor, and chair of the graduate committee. Completion of this process will be considered as admission to candidacy.

Satisfactory Student Progress
Graduate students are expected to consistently pursue the highest levels of achievement in all classes, programs, and activities in which they participate. The Athletic Training and Exercise Physiology faculty requires the following standard for satisfactory performance: (1) Consistent with university policy, grades of "D" and "F" are unsatisfactory. Students who receive a "D" or "F" in a course will be subject to a review by the graduate faculty of the program. The faculty may recommend either a dismissal from the program or may allow the student to remain in a probationary status. A second "D" or "F" will result in dismissal from the program. (2) Students who receive two grades of "C" will be subject to a review by the graduate faculty. The faculty may recommend either a dismissal from the program or may allow the student to
remain in a probationary status. A third "C" will result in dismissal from the program. (3) Graduate Assistants and Graduate Research Assistants are required to enroll in 6 hours each regular semester.

COURSES IN EXERCISE PHYSIOLOGY (EXPH)

5003. Research and Design 3(3-0)
Introductory principles of scientific inquiry, research methods applicable to these fields, evaluation of published research, and procedures for developing a research design.

5013. Applied Research Statistics 3(3-0)
Methods of acquisition, analysis, and interpretation of data most often encountered in sport and exercise science will be included. Emphasis will be placed on descriptive methods, statistical methods, and computer applications.

5023. Applied Exercise Physiology and Assessment 3(3-0)
This course develops a comprehensive understanding of exercise physiology and provides practical experience evaluating equipment and techniques used in the exercise science laboratory and clinic. Emphasis is on instrumentation used in the analysis and measurement of muscular, respiratory, cardiovascular, and nervous system structure and function. In addition, the course provides sections of various biochemical and physiological systems and how they respond to exercise and chronic training. Special reference will be made to the physiology of various types of sports as well as clinical tests and applications.

5043. Advanced Biomechanics 3(3-0)
This course represents an advanced study of the application of mechanical principles to the movement of biological systems. This course will focus on kinetic and kinematic concepts and how they apply to the qualitative and quantitative assessment as well as optimization of human movement.

5053. Psychosocial Aspects of Sport 3(3-0)
Theories and practices that influence the teaching and learning of game and sport skills, and coaching of athletics. A study of psychological processes that influence motor performance, including readiness, attention, arousal, memory, motivation, transfer, retention, concentration, confidence, and group dynamics.

5063. Graduate Seminar in Exercise Physiology 3(3-0)
Study of current topics relevant to sports, athletics, and recreation programs. May be repeated with the consent of instructor.

5073. Graduate Topics in Exercise Physiology 3(3-0)
Prerequisite: Consent of the Exercise Physiology Graduate Coordinator.
Offers the advanced student an opportunity to select a special area of interest for intensive research in human performance, sports, or recreation. A research paper is required. May be repeated once for credit.

5083. The Science Behind Injury & Rehabilitation 3(3-0)
Prerequisite: Graduate student status or Exercise Physiology Graduate Coordinator permission.
Integrating and incorporating knowledge of the human body in response to injury of the physically active individual. There will be a specific focus on evidence-based practice rehabilitation techniques that are typically underutilized.

5093. Advanced Exercise Physiology 3(3-0)
Prerequisite: EXPH 5023.
An in-depth exploration of current scientific literature specific to exercise physiology. Topics include bioenergetics, musculoskeletal growth and maturation, cardiorespiratory function and dysfunction, and human performance.

6003. Graduate Internship in Exercise Physiology 3 semester hours
Prerequisites: 9 hours of graduate work in Exercise Physiology and consent of instructor. A supervised experience in taking theory into practice in a variety of professional work environments. A minimum of
144 hours are to be spent working directly with patients, clients, students, or athletes. May not be repeated for credit.

6013. ECG and Heart Rate Analysis 3(3-0)
This class develops a foundation in electrocardiography (ECG) and heart rate analysis at rest and during work. This includes ECG lead placement, rate and rhythm, ECG complexes and intervals, conduction disturbances, arrhythmia, ECG identification of myocardial infarction location, and drug effects on an ECG. In addition, heart rate analysis will include myocardial responses in healthy vs. unhealthy populations.

6103. Independent Graduate Study: Research I 3 semester hours
Prerequisite(s): EXPH 5003, 5013.
Participation in faculty and graduate research projects in biomechanics, pedagogy, and physiology.

6113. Independent Graduate Study: Research II 3 semester hours
Prerequisite: EXPH 6103.
Participation in faculty and graduate research. Content will include research design, literature review, methodology, statistical procedures and interpretation of results.

6983, 6993. Thesis 6 semester hours
Prerequisite(s): EXPH 5003, 5013.

5. Dr. Hamilton made a motion to adopt the following graduate course changes in Athletic Training and Exercise Physiology; Dr. Cate seconded and the motion was adopted (closed).

Exercise Physiology New Course Additions, effective Fall 2012

EXPH 5043. Advanced Biomechanics
Prerequisite(s): Graduate standing in program, or permission of the instructor
This course represents an advanced study of the application of mechanical principles to the movement of biological systems. This course will focus on kinetic and kinematic concepts and how they apply to the qualitative and quantitative assessment as well as optimization of human movement.
Lecture 3(3-0)
Course Objectives: The course will introduce students to the basic concepts and analysis techniques used in biomechanics with a focus on the analysis of human movement. At the completion of this course students should be able to:
1. Describe and define movements and fundamental biomechanical principles using scientific terminology.
2. Define, recognize, and apply concepts of both linear and angular kinematics and kinetics as they apply to the analysis of human movement.
3. Recognize the equipment and techniques used for the quantitative assessment of human movement.
4. Apply biomechanical principles to human movement situations including but not limited to performance, training, rehabilitation, and injury prevention.
5. Evaluate the mechanics of exercises and activities as they affect the human body.
6. Apply principles related to internal tissue loading to improving tissue structure and function, and to injury prevention.
7. Investigate current topics in biomechanical literature
8. Demonstrate the use of biomechanical evidence to professional practice

EXPH 6013. ECG & Heart Rate Analysis
Prerequisite(s): Graduate standing in program, or permission of the instructor
This class develops a foundation in electrocardiography (ECG) and heart rate analysis at rest and during work. This includes ECG lead placement, rate and rhythm, ECG complexes and intervals, conduction disturbances, arrhythmia, ECG identification of myocardial infarction location, and drug effects on an ECG. In addition, heart rate analysis will include myocardial responses in healthy vs. unhealthy populations.
Lecture 3(3-0)
Course Objectives: The course will expose student to the concept of electrocardiography, ECG interpretation and distinction between healthy myocardial responses and unhealthy responses during rest and work. At the completion of this course, students will be able to do the following:
1. ECG electrode placement
2. Perform an ECG
3. Interpret an ECG in terms of normal vs. abnormal ECG tracing
4. Understand Structure and Function of the Myocardium, Cardiac Cycle, Cardiac Output
5. Understand Regulation of the Heart, Nural, Intrinsic & Extrinsic Factors affecting heart rate
6. Understand Electrical Activitye, Ionic Basis, Cardiac Excitability, Arrhythmia
7. Understand Hemodynamics, Arterial System, determinants of blood pressure, Peripheral circulation & control

Change of course title, effective Fall 2012
EXPH 6103. Independent Study: Research I
EXPH 6103: Research I

EXPH 6113. Independent Study: Research II
EXPH 6113. Research II

6. Dr. Hamilton made a motion to adopt the following graduate course changes in Nursing; Dr. Nemecek seconded and the motion was adopted (closed).

Change of Prerequisite, effective Fall 2012
NURS 5133: Advanced Pharmacotherapeutics
Prerequisite: NURS 5043: Advanced Pathophysiology
Prerequisite: Admission to the MSN program
Rationale: The Advanced Pharmacotherapeutics course builds upon a baccalaureate foundation of pathophysiology and pharmacology. Advanced pathophysiology concepts are integrated into the advanced pharmacotherapeutics course where appropriate.

Adjournment

There being no other business, the meeting was adjourned at 3:30 p.m.

Respectfully submitted,

Deb Schulte, Assistant to the Provost