The Health and Human Performance Major Field Test (Exit Exam) has been developed to meet the requirements for graduation of a culminating exam testing major content knowledge from the program of study.

**Major Field Test Hold:** To remove the hold for this test you must click on the link to remove the hold and select from the drop down menu the option that you will go to Gooch Hall and sign up for the PRAXIS. Once you have selected this option click “OK”. This will remove the hold. You DO NOT have to go to Gooch Hall, nor do you have to sign up for the PRAXIS. Going through these steps will remove the hold.

The Health and Human Performance exam(s) are 100 questions each, one for the Exercise Science and Wellness students and the other for the Sport Management students. Each test is made up of 50 questions from the common core curriculum for all the concentrations and the other 50 questions are concentration specific. The following describes the courses that the questions have come from. It is recommended that the students keep all their notes from the following classes so that they can review and prepare for the Major Field Test.

Health and Human Performance Core (50 questions):
- EXSC 305
- HLTH 111, 220, 351
- HPER 432, 435, 440

Exercise Science and Wellness Core (50 questions):
- EXSC 430, 431, 433
- HLTH 330, 410
- HPER 207, 350

Sport Management (50 questions):
- SPMG 305, 406, 413

**When is the Major Field Test taken:** The Major Field Test will be administered to Internship students only. The test is given at week 3 or 4 of the semester during the internship and then again at week 13. Students must pass this exam with a 70% or better. If on the first try a passing score is not achieved, then the student will be allowed to take the test a second time at week 13. It is presumed that students will use the course objectives provided on this document to study and review for the Major Field Test.

Students who are at an internship site ± 50 miles of the UT Martin Campus will be required to come to campus to take the exam. Students who are outside that area can come to campus, but if that is not practical, the exam will be mailed to the site supervisor and proctored at the internship site and then mailed back for grading.
GOALS/OBJECTIVES

Health 330 – Epidemiology
Each student will:
1. Define the term epidemiology
2. Describe three uses of epidemiology
3. Differentiate between incidence and prevalence
4. Differentiate between crude and specific rates
5. State three factors that affect the quality of epidemiological data
6. List four data sources that are used in epidemiologic research
7. Define the term descriptive epidemiology
8. Describe the process of epidemiologic inference in the context of descriptive epidemiology
9. Give two examples of each of person, place, and time variables and describe how they relate to the distribution of health outcomes
10. Distinguish between non-causal and causal associations
11. State three criteria for causality
12. Describe case-control, ecologic, and cohort studies
13. Calculate odds ratio, relative risk, and attributable risk
14. Describe modes of transmission of communicable diseases
15. Give two examples of how lifestyle is associated with negative health outcomes
16. Describe two applications of occupational epidemiology
17. State a role for epidemiology in the primary prevention of unintentional injuries and violence
18. Calculate sensitivity and specificity for screening tests

Health 351 – Substance Use/Abuse
Each student will:
1. Basic terminology concerning drugs and drug-taking behavior
2. The origins and history of drugs and drug-taking behavior
3. Present day statistics of drug use in the United States
5. The personal and social dangers of drug abuse
6. Effective and lethal dose-response curves as indices of drug toxicity
7. Drug tolerance and its problems for drug abusers
8. The distinction between physical and psychological dependence
9. The impact of drug abuse on pregnancy and AIDS
10. The relationship between drug abuse and violent crime
11. U.S. drug enforcement policy and an attempt to regulate drug-taking behavior
12. The ways drugs enter and exit the body
13. Factors determining the physiological impact of drugs
14. The sympathetic and parasympathetic branches of the autonomic nervous system
15. How neurons work and how they communicate with each other
16. Explanation of drug actions on neurotransmitters
17. The placebo effect in drug-taking behavior
18. The history of cocaine, amphetamine, marijuana, the major narcotics and how these drug work in the brain
19. Treatment strategies for heroin dependence
20. The classification of hallucinogenic drugs
21. The special dangers of phencyclidine (PCP), ketamine, and MDMA (Ecstasy)
22. The question of marijuana decriminalization
23. The history of drug abuse in sports
24. How anabolic steroids work
25. The health risks associated with steroid abuse
26. Patterns of steroid use
27. Dietary supplements used as ergogenic aids
28. Present-day drug testing in amateur and professional athletics
29. Patterns of alcohol consumption
30. The pharmacology of alcohol
31. Acute physiological and behavioral effects of alcohol
32. Strategies for responsible alcohol consumption
33. Patterns of chronic alcohol abuse
34. Approaches to treatment for alcoholism
35. Adverse health consequences from tobacco use
36. Patterns of inhalant abuse and its chronic effects
37. The distinction between prescription and OTC drugs
38. FDA procedures for approving new drugs
39. Newly developed sedative-hypnotics and anti-anxiety drugs
40. Drug that are commonly used as date-rape drugs
41. Treatment for panic attacks, mania, bipolar disorder, and obsessive-compulsive disorder
42. How antidepressant work in the brain
43. The biopsychosocial approach to drug-abuse treatment
44. Prison-alternative and prison-based treatment programs
45. The importance of family dynamics in drug abuse and treatment
46. The National Drug Control Policy and Healthy People 2010 strategies and goals for alcohol, tobacco, and other drug prevention.
47. Successful school-based prevention and education programs
48. Risk factors, protective factors, and resiliency theory
49. The importance of family systems in prevention and education
50. Multicultural issues in prevention and education

Human Performance 350 – Motor Behavior
Each student will:
1. Define the areas of motor behavior: motor learning, motor development, and motor control.
2. Recognize the evolution of motor behavior and identify the leading figures in the field.
3. Define and discern skills, motor skills, actions, and movements.
4. Classify motor skills.
5. Define motor abilities and distinguish between general motor abilities and specific motor abilities.
6. Define the general motor ability hypothesis.
7. Identify motor abilities.
10. Describe the purpose of reflexes and their relationship to voluntary movement.
11. Identify the developmental steps for fundamental, locomotor, ballistic, and manipulative skills.
12. Recognize efficient and inefficient basic skill patterns.
13. Assess beginning, intermediate, and advanced developmental levels of basic motor skill performance of various age groups.
15. Describe the interrelationship among attention, memory, and movement speed.
16. Describe the relationship between sensory perception and the development of motor skills.
17. Describe and contrast Fitts and Posner’s Two Stage of Learning Model with Gentile’s Three Stage Model of Learning.
18. Identify instructional recommendations for each stage of learning of Fitts and Posner’s and Gentile’s models.
19. Identify factors influencing task difficulty for various motor skills.
20. Define the role of demonstration and verbal instruction.
21. Contrast the difference between knowledge of performance and knowledge of results for improving skill performance and motivation.
22. Describe the role of varied practice experiences in skill acquisition.
23. Identify environmental and equipment modifications for improving performance at different developmental levels.
24. Describe basic skill observation techniques.
26. Define several major theoretical approaches for studying development.
27. Discriminate between development, growth, and maturation.
29. Describe various growth parameters including body proportion ratios.
30. Describe the interrelationships between growth and maturation characteristics and motor performance across the lifespan.
31. Interpret distance and velocity graphs for specific growth measures.
32. Describe the relationship between growth/maturation of various body systems and health-related/skill-related components of fitness across the lifespan.
33. Define and identify the motor milestones occurring across the lifespan.
34. Define critical periods and readiness and the role of the environment.
35. Describe the interrelationship among attention, memory, and movement speed.
36. Identify the various social and cultural constraints influencing motor behavior.
Exercise Science 430 – Exercise Physiology
Each student will:
1. Interpret the ACSM Position Stand on Quantity & Quality of Exercise and Describe the Physiological and Psychological Effect of Physical Activity on Health.
2. Define and Describe Muscular and Neurological Control of Movement
3. Recognize Factors Contributing to Basic Energy Systems and Bioenergetics (ability to produce energy)
4. Describe Hormonal Effects on Metabolism
5. Define and Describe Acute and Chronic Responses to Cardiovascular and Resistance Training in men and females.
6. Apply the Principles of Performance Optimization to Specific Athletic Populations
7. Define and Analyze the Components of Health-Related Physical Fitness and Administer Tests to Assess HRPF (aerobic capacity, muscular strength, muscular endurance, flexibility, and body composition) using the latest equipment available.
8. Discuss the Advantages and Disadvantages of various Flexibility Programs
9. Compare and Contrast the Risks and Benefits of Performance and HRPF Training associated with specific Age, Gender, and ethnic Populations.
10. Identify Cardiovascular Disease Risk Factors and Physical/Environmental Risk Factors associated with Moderate and Vigorous Physical Activity
11. Identify Scientific Theories related to Sport/Activity Participation in various Temperature Extremes and Altitudes

Exercise Science 431 – Exercise Test and Prescription: General Populations
Each student will:
ACSM HEALTH FITNESS SPECIALIST (HFS)
Assess client’s CV risk factors and other records
Describe and execute the following skills:
- body fat analysis
- cardiovascular analysis
- flexibility analysis
- muscle strength/endurance analysis
Provide exercise prescription based on test results
ACSM’S KSA’s
1.1.11 Knowledge of the following terms: ischemia, angina pectoris, tachycardia, bradycardia, arrhythmia, myocardial infarction, cardiac output, stroke volume, lactic acid, oxygen consumption, hyperventilation, systolic blood pressure, diastolic blood pressure, and anaerobic threshold.
1.1.12 Knowledge to describe normal cardiorespiratory responses to static and dynamic exercise in terms of heart rate, blood pressure, and oxygen consumption.
1.1.17 Knowledge of the physiological adaptations that occur at rest and during submaximal and maximal exercise following chronic aerobic and anaerobic exercise training.

1.1.18 Knowledge of the differences in cardiorespiratory response to acute graded exercise between conditioned and unconditioned individuals.

1.1.26 Knowledge of the response of the following variables to acute static and dynamic exercise: heart rate, stroke volume, cardiac output, pulmonary ventilation, tidal volume, respiratory rate, and arteriovenous oxygen difference.

1.1.27 Knowledge of the blood pressure responses associated with acute exercise, including changes in body position.

1.1.43 Ability to locate the anatomic landmarks for palpation of peripheral pulses.

1.2.2 Knowledge of cardiovascular, respiratory, metabolic, and musculoskeletal risk factors that may require further evaluation by medical or allied health professionals before participation in physical activity.

1.2.3 Knowledge of risk factors that may be favorably modified by physical activity habits.

1.2.5 Knowledge of plasma cholesterol levels for adults as recommended by the National Cholesterol Education Program.

1.2.6 Knowledge of the risk factor concept of CAD and influence of heredity and lifestyle on the development of CAD.

1.2.8 Knowledge of how lifestyle factors, including nutrition, physical activity, and heredity, influence lipid and lipoprotein profiles.

1.3.2 Knowledge of the importance of a health/medical history.

1.3.3 Knowledge of the value of a medical clearance prior to exercise participation.

1.3.4 Knowledge of the categories of participants who should receive medical clearance prior to administration of an exercise test or participation in an exercise program.

1.3.5 Knowledge of relative and absolute contraindications to exercise testing or participation.

1.3.6 Knowledge of the limitations of informed consent and medical clearance prior to exercise testing.

1.3.7 Knowledge of the advantages/disadvantages and limitations of the various body composition techniques, including air displacement, plethysmography, hydrostatic weighing, skinfolds and bioelectrical impedance.

1.3.8 Skill in accurately measuring heart rate, blood pressure, and obtaining rating of perceived exertion (RPE) at rest and during exercise according to established guidelines.

1.3.9 Skill in accurately measuring skinfold sites, skeletal diameters, and girth measurements used for estimating body composition.

1.3.11 Ability to locate the brachial artery and correctly place the cuff and stethoscope in position for blood pressure measurement.

1.3.12 Ability to locate common sites for measurement of skinfold thicknesses and circumferences (for determination of body composition and waist-hip ratio).

1.3.13 Ability to obtain a health history and risk appraisal that includes past and current medical history, family history of cardiac disease, orthopedic limitations, prescribed medications, activity patterns, nutritional habits, stress and anxiety levels, and smoking and alcohol use.
1.3.14 Ability to obtain informed consent.
1.3.15 Ability to explain the purpose and procedures for monitoring clients prior to, during, and after cardiorespiratory fitness testing.
1.3.16 Ability to instruct participants in the use of equipment and test procedures.
1.3.17 Ability to describe the purpose of testing, determine an appropriate submaximal or maximal protocol, and perform an assessment of cardiovascular fitness on the cycle ergometer or the treadmill.
1.3.18 Ability to describe the purpose of testing, determine appropriate protocols, and perform assessments of muscular strength, muscular endurance, and flexibility.
1.3.19 Ability to perform various techniques of assessing body composition, including the use of skinfold calipers.
1.3.20 Ability to analyze and interpret information obtained from the cardiorespiratory fitness test and the muscular strength and endurance, flexibility, and body composition assessments for apparently healthy individuals and those with stable disease.
1.3.21 Ability to identify appropriate criteria for terminating a fitness evaluation and demonstrate proper procedures to be followed after discontinuing such a test.
1.3.22 Ability to modify protocols and procedures for cardiorespiratory fitness tests in children, adolescents and older adults.
1.3.23 Ability to identify individuals for whom physician supervision is recommended during maximal and submaximal exercise testing.
1.7.9 Knowledge of selecting appropriate testing and training modalities according to the age and functional capacity of the individual.
1.7.10 Knowledge of the recommended intensity, duration, frequency, and type of apparently healthy population.
1.7.24 Skill in the use of various methods for establishing and monitoring levels of exercise intensity, including heart rate, RPE, and METs.
1.7.28 Ability to determine training heart rates using two methods: percent of age-predicted maximum heart rate and heart rate reserve (Karvonen).
1.7.33 Ability to design, implement, and evaluate individualized and group exercise programs based on health history and physical fitness assessments.
1.7.35 Knowledge and ability to determine energy cost, VO2, METs, and target heart rates and apply the information to an exercise prescription.
1.7.39 Ability to prescribe exercise intensity based on VO2 data for different modes of exercise, including graded and horizontal running and walking, cycling and stepping exercise.
1.7.43 Ability to evaluate flexibility and prescribe appropriate flexibility exercises for all major muscle groups.
1.7.46 Ability to modify exercise programs based on age, physical condition, and current health status.
1.8.2 Knowledge to define the following terms: obesity, overweight, percent fat, lean body mass, anorexia nervosa, bulimia, and body fat distribution.
1.8.16 Knowledge of the NIH Consensus statement regarding health risks of obesity, Nutrition for Physical Fitness Position Paper of the American Dietetic Association, and the ACSM Position Stand on proper and improper weight loss programs.
1.10.9 Knowledge of safety plans, emergency procedures, and first aid techniques needed during fitness evaluations, exercise testing, and exercise testing.
1.11.2 Knowledge of and the ability to use the documentation required when a client shows signs or symptoms during an exercise session and should be referred to a physician.
1.11.8 Ability to create and maintain records pertaining to participant exercise adherence, retention and goal setting.
2.2.1 Knowledge of cardiovascular risk factors or conditions that may require consultation with medical personnel before testing or training, including inappropriate changes of resting or exercise heart rate and blood pressure, new onset discomfort, in chest, neck, shoulder, or arm, changes in the pattern of discomfort during rest or exercise, fainting or dizzy spells, and claudication.
4.2.1 Knowledge of metabolic risk factors or conditions that may require consultation with medical personnel before testing or training, including body weight more than 20% above optimal, BMI>30, thyroid disease diabetes or glucose intolerance, and hypoglycemia.
5.2.1 Knowledge of musculoskeletal risk factors or conditions that may require consultation with medical personnel before testing or training, including acute or chronic back pain, osteoarthritis, rheumatoid arthritis, osteoporosis, tendonitis, and low back pain.

Sport Management 3050 Introduction to Sport Management and Administration
Each student will:
1. Understand, describe, and apply basic administrative principles as applied to sport organizations and industry.
2. Identify and explain administrative/organizational theories, terminology, and structure as they exist in sport settings.
3. Understand, describe, and apply basic principles regarding management, marketing and finance for sport organizations.
4. Understand, describe, and apply basic legal and ethical principles as applied to sport organizations.
5. Design and implement programs utilizing organizational principles for the administration of sport related programs.

Sport Management 406 – Advanced Sport Management and Administration
Each student will:
1. Articulate thoughtful positions on several current issues facing the sport industry today and in the near future.
2. Identify and describe several theories relating to sport management and administration.
3. Feel more comfortable presenting sport management academic contents and current issues in sport.
4. Demonstrate effective communication and presenting skills.
5. Prepare future career in sport.
Sport Management 413 – Event and Facility Planning
Each student will:
1. Recognize the necessary steps in managing a facility.
2. Discuss the similarities and differences between event and facility management.
3. Demonstrate an understanding of the procedures, principles, and current trends in planning and managing an event or facility.
4. Explain the need for effective risk management of facilities and events.
5. Knowledge of venue and event management.
6. An understanding of the importance of customer service.
7. Importance of economic impact of venues and events.
8. Understand the unique situations involved in running international events.

Exercise Science 305 – Applied Human Movement
Each student will:
1. Description of movements and examination of how mechanical concepts/principles apply to effective and efficient human movement.
2. Analysis of physical activity as it relates to the physiological responses and adaptations to exercise.
3. Investigation of the acquisition and enhancement of motor skill performance and utilize methods and strategies to minimize the decline of motor skill performance and injury.
4. Utilize measurement concepts and theory to assess performance in the cognitive and psychomotor domains to assess program effectiveness.
5. Demonstrate the ability to research, organize, evaluate, and communicate information in the discipline of Kinesiology.
6. Communication: Students will apply knowledge of effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in sport and physical activity.
7. Reflection and Critical Thinking: Students will demonstrate reflection and critical thinking in order to refine professional practice.
8. Programming and Assessment: Students will demonstrate evidence-based knowledge and skills for assessing client needs for designing, implementing, and evaluating programs requiring physical activity.
9. Professionalism and Ethics: Students will demonstrate professional behaviors, including commitment to excellence, valuing diversity and collaboration, service to others, and techniques for lifelong learning.
10. Value Physical Activity and Fitness: Students will articulate a philosophy that physical activity programs are important to health and well being of individuals, and that physical activity can foster self-expression, development, and learning.
Human Performance 207 – Principles of Fitness Training
Each Student will:
1. Explain the importance of physical activity and physical fitness
2. Discuss the physical, social, and psychological benefits of being fit
3. List the component parts of physical fitness
4. Describe several behavioral strategies to enhance exercise and health behavior change
5. Describe specific techniques to enhance motivation
6. Define extrinsic and intrinsic reinforcement and give examples of each
7. Identify specific counseling approaches that may assist less motivated clients to increase their physical activity
8. Discuss the importance of creating a healthy lifestyle of living and how fitness fits into this lifestyle.
9. Identify the basic principles of a fitness program
10. Discuss the importance of the warm-up and cool-down periods
11. Discuss the physiological principles related to warm-up and cool down
12. Understand the concept of detraining and reversibility of conditioning and their implication in physical training
13. Understand how to determine individual goals for a fitness program
14. Identify precautions for beginning a fitness program.
15. Explain how to modify cardiovascular and resistance exercises based on age and physical condition
16. Describe the recommended intensity, duration, frequency, and type of physical activity necessary for development of cardiorespiratory fitness in an apparently healthy population
17. Demonstrate the ability to monitoring intensity of physical activity
18. Define strength, endurance, and power and indicate their relevance to health and skill of performance
19. Define progressive resistance, isotonic/isometric, concentric, eccentric, atrophy, hypertrophy, sets, repetitions, plyometrics, valsalva maneuver
20. Discuss factors that determine levels of muscular strength
21. Explain the physiological changes that occur which increase strength
22. Explain why core stabilization exercises should be a part of all strength training programs
23. Demonstrate proper techniques for using progressive resistance exercise to develop strength and muscular endurance in specific muscle groups
24. Discuss various techniques for improving muscle strength and endurance
25. Explain how functional strengthening exercises and plyometrics can be incorporated in to strength training programs
26. Demonstrate various callisthenic exercises that can be used for increasing muscular strength.
27. Describe the relationship between repetitions, intensity, number of sets, and rest with regard to strength training.
28. Define flexibility and describe its importance as a health-related component of fitness
29. Identify factors that limit flexibility
30. Explain and demonstrate the difference between dynamic, static, and PNF stretching
31. Describe and demonstrate stretching exercises that may be used to improve flexibility at specific joints throughout the body
32. Explain the distinction between body weight and body composition
33. Identify various methods for losing body fat
34. Assess the importance of lifestyle modification for long-term weight control
35. Demonstrate proper instructing techniques of various resistance and aerobic training methods.

Health 410 – Health Education and Promotion
Each student will:
1. Explain the relationship among good health behavior, health education, and health promotion.
2. Identify the assumptions upon which health education is based.
3. Identify the models commonly used in planning health promotion programs.
4. Identify the basic components of the planning models presented.
5. Explain what planning parameters are and the impact they have on program planning.
6. Define needs assessment and explain why a needs assessment must be completed.
7. Differentiate between primary and secondary data sources.
8. Define measurement and quantitative and qualitative measures.
9. Discuss the advantages and disadvantages of data collection from self report, observation, existing records, and meetings.
10. Explain the various types of validity.
11. Define reliability and explain why it is important.
12. Differentiate between probability and non-probability samples.
13. Define goals and objectives, and distinguish between the two.
14. Describe the use for Healthy People 2010.
15. Define theory, model, construct, concepts and variables.
16. Briefly explain the theories and models identified during the semester.
17. List and explain the categories of intervention strategies.
18. Discuss the ethical concerns related to intervention development.
19. Define community, community organizing, community building, and coalitions.
20. Outline the process for organizing and building community.
21. Explain the term mapping community capacity.
22. List the common resources used in most health promotion programs
23. Explain the difference between internal and external resources.
24. Define culturally sensitive and culturally competent.
25. Identify and explain the major components of a grant proposal.
26. Define market, marketing, and social marketing.
27. Explain the diffusion theory.
28. Explain the four Ps of marketing.
29. Name techniques for motivating program participants to continue in a program.
30. Identify the different phases for implementing health promotion programs
31. List the concerns that need to be addressed before implementation can take place.
32. Compare and contrast the various types of evaluation.
33. List reasons why evaluation should be included in all programs.
34. Describe several considerations in planning and conducting an evaluation.
35. Identify the six steps and four standards of the framework for program evaluation.
36. Compare and contrast the major types of evaluation design.
37. Identify threats to internal and external validity and explain how evaluation
design can increase control.
38. List examples of univariate, bivariate, and multivariate analysis and explain how
they could be used in evaluation.
39. Describe the format for the evaluation report, guidelines for presenting data, and
ways to enhance the report.
40. Discuss ways to increase the utilization of the evaluation findings.

Human Performance 432 – Sport and Exercise Psychology
Each Student will:
1. To increase students’ understanding of how psychological factors influence
   involvement and performance in sports, exercise, physical education, health, and
   athletic training sessions.
2. To increase students’ understanding of how participation in sport, exercise, and
   physical education affects the psychological makeup of the individual.
3. To help students acquire skills and knowledge about sport and exercise
   psychology that can be applied as a coach, teacher, exercise leader, health
   specialist, and/or athletic trainer.

Human Performance 440 – Evaluation in Human Performance
Each Student will:
1. Demonstrate an understanding of the relationships among goals, objectives, tests,
   measurement, and evaluation.
2. Demonstrate competency in organizing and interpreting statistical measurements
   for evaluation:
   a. List, define, and describe measures of central tendency.
   b. Be able to explain relationships, compare and contrast variance, standard
      deviation, correlation and prediction.
   c. Be able to calculate standard scores and percentiles.
   d. Be able to calculate and interpret z scores and correlation coefficients.
   e. Be able to calculate and interpret t-test and ANOVA results.
3. Be able to differentiate among validity, reliability, and objectivity and apply these
   concepts to test construction and evaluation.
4. Demonstrate the ability to prepare a sample design for scientific research in the
   areas of a case study, outcome measurement, and literature review.
5. Differentiate between measurement and evaluation.
6. Define and differentiate between criterion- and norm-referenced tests.
7. Describe tests used to evaluate fitness and wellness.
8. Accurately identify, describe, calculate, and interpret distributions, 3 measures of central tendency, and 3 measures of variability, percentiles, standard scores, and predictions from regression formulas.
9. Define and differentiate between reliability and objectivity for norm-referenced tests and for criterion-referenced tests.
10. Define validity and describe factors that influence validity.
11. Differentiate between motor-fitness and health-fitness batteries.
12. Administer psychomotor and sport skills tests, interpret the results, and make recommendations for improvement.
13. Enter data into computer, analyze results using tables, create scattergams or bar graphs.

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