

**CURRICULUM COMMITTEE**  
**December 5, 2014**  
**Minutes**

**Present:** Diane Brice, Claudie Biggers, Susan Burks, Tamara Clunis, Kim Davis, Kristin Edford, Dan Ferguson, Lyndy Forrester, Matthew Goodman, Kim Hays, Alan Kee, Kristin McDonald-Willey, Carol Moore, Jason Norman, Delila Paredes, Richard Pullen, Tamra Rocsko, Mark Rowh, and Kathy Wetzel

**Absent:** Jerry Moller, Kelly Prater and Randall Sims

**Others Present:** Carol Buse, Mark Usnick and Collin Witherspoon

**Core Updates**

The following updated 42 hour AA/AS core was submitted for approval:

General Education Requirements (42 Semester Hours)

<b>CURRENT CORE</b>	<b>PROPOSED CORE</b>
<b>Communication - 9 Hours</b> <ul style="list-style-type: none"> <li>• ENGL 1301: Composition I</li> <li>• ENGL 1302: Composition II</li> <li>• Speech – 3 Hours</li> </ul>	<b>Communication – 6 Hours</b> <ul style="list-style-type: none"> <li>• <b>ENGL 1301: Composition I</b></li> <li>• <b>ENGL 1302: Composition II</b> Or <b>ENGL 2311: Technical &amp; Business Writing</b></li> </ul>
<b>Mathematics – 3 Hours</b>	<b>Mathematics - 3 Hours</b>
<b>Natural Sciences - 8 Hours</b>	<b>Life &amp; Physical Sciences - 6 Hours*</b>
<b>Humanities - 3 Hours</b>	<b>Language, Philosophy &amp; Culture – 3 Hours</b>
<b>Visual &amp; Performing Arts - 3 Hours</b>	<b>Creative Arts – 3 Hours</b>
<b>Social/Behavioral Sciences - 15 Hours</b> <ul style="list-style-type: none"> <li>• GOVT 2305: United States Government</li> <li>• GOVT 2306: Texas Government</li> <li>• HIST 1301: United States History I</li> <li>• HIST 1302: United States History II</li> <li>• Social/Behavioral Science – 3 Hours</li> </ul>	<b>American History – 6 Hours</b> <b>Government/Political Science – 6 Hours</b> <b>Social &amp; Behavioral Sciences – 3 Hours</b>
<b>Lifetime Fitness – 1 Hour</b>	<b>Component Area Option – 6 Hours</b> <ul style="list-style-type: none"> <li>• <b>Speech – 3 Hours</b></li> <li>• <b>Science Labs – 2 Hours</b></li> <li>• <b>EDUC/PSYC 1100 – 1 Hours**</b></li> </ul>
	<b>*Offer 4 hour science courses and move 2 lab hours to Component Area Option/Institutional Requirements</b>

\*\* If EDUC/PSYC 1100 is not required, then student must choose a course from the approved General Education Course List.

And the following updated 15 hour AAS core was submitted for approval:

## AAS GENERAL EDUCATION REQUIREMENTS

	AAS Degrees
COMMUNICATION • ENGL 1301: Composition I	3
SOCIAL/BEHAVIORAL SCIENCE*	3
LIFE & PHYSICAL SCIENCES* Or MATHEMATICS*	3
LANGUAGE, PHILOSOPHY & CULTURE* Or CREATIVE ARTS*	3
COMPONENT AREA OPTION • Speech (Communication foundational component area)	3

\* As specified in individual curricula or selected from the General Education Course List.

Ferguson moved, seconded by Wetzel to approve the AA/AS and AAS core curriculum updates. The motion carried.

### **ACGM Course Updates**

The following updates to the ACGM courses were approved by the Co Board in October 2014. The updates include:

#### **BIOL 2401: Anatomy & Physiology I**

Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides hands-on learning experience for exploration of human system components and basic physiology.

Learning Outcomes:

- Use anatomical terminology to identify and describe locations of major organs of each system covered.
- Explain interrelationships among molecular, cellular, tissue and organ functions in each system.
- Describe the interdependency and interactions of the systems.
- Explain contributions of organs and systems to the maintenance of homeostasis.
- Identify causes and effects of homeostatic imbalances.
- Describe modern technology and tools used to study anatomy and physiology.
- Apply appropriate safety and ethical standards.
- Locate and identify anatomical structures.
- Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems and virtual simulations.
- Work collaboratively to perform experiments.
- Demonstrate the steps involved in the scientific method.

- Communicate results of scientific investigations, analyze data and formulate conclusions.
- Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing and summarizing to make decisions, recommendations and predictions.

### **BIOL 2402: Anatomy & Physiology II**

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance) and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology.

Learning Outcomes:

- Use anatomical terminology to identify and describe locations of major organs of each system covered.
- Explain interrelationships among molecular, cellular, tissue and organ functions in each system.
- Describe the interdependency and interactions of the systems.
- Explain contributions of organs and systems to the maintenance of homeostasis.
- Identify causes and effects of homeostatic imbalances.
- Describe modern technology and tools used to study anatomy and physiology.
- Apply appropriate safety and ethical standards.
- Locate and identify anatomical structures.
- Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems and virtual simulations.
- Work collaboratively to perform experiments.
- Demonstrate the steps involved in the scientific method.
- Communicate results of scientific investigations, analyze data and formulate conclusions.
- Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing and summarizing, to make decisions, recommendations and predictions

### **BIOL 2420: Microbiology for Non-Sciences Majors**

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases and public health. The lab covers basics of culture and identification of bacteria and microbial ecology.

Learning Outcomes:

- Describe distinctive characteristics and diverse growth requirements of prokaryotic organisms compared to eukaryotic organisms.
- Provide examples of the impact of microorganisms on agriculture, environment, ecosystem, energy and human health, including biofilms.

- Distinguish between mechanisms of physical and chemical agents to control microbial populations.
- Explain the unique characteristics of bacterial metabolism and bacterial genetics.
- Describe evidence for the evolution of cells, organelles and major metabolic pathways from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.
- Compare characteristics and replication of acellular infectious agents (viruses and prions) with characteristics and reproduction of cellular infectious agents (prokaryotes and eukaryotes).
- Describe functions of host defenses and the immune system in combating infectious diseases and explain how immunizations protect against specific diseases.
- Explain transmission and virulence mechanisms of cellular and acellular infectious agents.
- Use and comply with laboratory safety rules, procedures and universal precautions.
- Demonstrate proficient use of a compound light microscope.
- Describe and prepare widely used stains and wet mounts, and discuss their significance in identification of microorganisms.
- Perform basic microbiology procedures using aseptic techniques for transfer, isolation and observations of commonly encountered, clinically significant bacteria.
- Use different types of bacterial culture media to grow, isolate and identify microorganisms.
- Perform basic bacterial identification procedures using biochemical tests.
- Estimate the number of microorganisms in a sample using methods such as direct counts, viable plate counts or spectrophotometric measurements.
- Demonstrate basic identification protocols based on microscopic morphology of some common fungi and parasites.

### **COMM 1307: Introduction to Mass Communication**

Survey of basic content and structural elements of mass media and their functions and influences on society.

Learning Outcomes:

- Demonstrate understanding of the fundamental types, purposes and relevance of mass communication.
- Demonstrate understanding of mass media in historic, economic, political and cultural realms.
- Demonstrate understanding of the business aspects of mass media and the influence of commercialism.
- Demonstrate understanding of evolving media technologies and relevant issues and trends.
- Demonstrate understanding of mass media values, ethics, laws and industry guidelines.
- Demonstrate understanding of globalization of mass media.
- Demonstrate understanding of media effects on society.

### **COMM 1318: Photography I**

Introduction to the basics of photography, including techniques and equipment operation.

Learning Outcomes:

- Demonstrate ability to operate equipment used to capture and edit photographic images.
- Demonstrate understanding of composition, framing and perspective in photography.

- Analyze and discuss aesthetic considerations of visual storytelling.
- Discuss ethical implications of photographic manipulation.

### **COMM 1336: Video Production I**

Practical experience in the operation of studio and control room equipment, including both pre- and post-production needs.

Learning Outcomes:

- Identify video equipment necessary for content production.
- Demonstrate understanding of effective lighting techniques.
- Operate studio equipment to create video content.
- Demonstrate ability to collaborate in team environment.
- Demonstrate effective and safe use of studio equipment.
- Demonstrate basic camera operation and shot composition in a multi-camera production.
- Demonstrate basic audio production techniques, including use of various microphone types and mixing for studio production.
- Identify the roles of production personnel in a studio production.

### **COMM 2303: Audio Production**

Practical experience in the operation of audio equipment, including both prep and post-production needs.

Learning Outcomes:

- Identify audio equipment necessary for content production.
- Demonstrate understanding of effective sound editing techniques.
- Operate studio equipment to create audio content.
- Demonstrate basic announcing skills.

### **COMM 2311: Media Writing**

Fundamentals of writing for the mass media. Includes instruction in professional methods and techniques for gathering, processing and delivering content.

Learning Outcomes:

- Demonstrate proper media writing and editing styles.
- Modify writing styles to fit various media platforms.
- Demonstrate effective information gathering skills and techniques.
- Demonstrate understanding of laws, ethics and responsibilities of media writing.

### **COMM 2315: News Reporting**

This course focuses on advanced new-gathering and writing skills. It concentrates on the three-part process of producing news stories: discovering the news, reporting the news and writing the news in different formats.

Learning Outcomes:

- Evaluate newsworthiness of information.
- Demonstrate an understanding of story idea creation.
- Comprehend the basic structure and format of a news story (lead, body and conclusion).
- Demonstrate an understanding of beat reporting and feature writing.
- Demonstrate an understanding of multimedia journalism and alternative story forms.
- Demonstrate an understanding of journalistic ethics.

### **COMM 2327: Introduction to Advertising**

Fundamentals of advertising including theory and strategy, copywriting, design and selection of media.

Learning Outcomes:

- Identify types, functions and characteristics of historical and modern advertising.
- Demonstrate understanding of advertising in the economic and social system.
- Demonstrate understanding of advertising regulations and ethical implications.
- Analyze advertising content and media strategy.
- Identify various tools and technologies employed in producing advertising messages.

### **COMM 2330: Introduction to Public Relations**

Exploration of the history and development of public relations. Presentation of the theory behind and process of public relations, including the planning, implementation and evaluation of PR campaigns.

Learning Outcomes:

- Demonstrate basic knowledge of public relations terms, concepts, history and practice.
- Describe various publics, media venues and jobs associated with public relations.
- Recognize PRSA code and ethical issues associated with public relations industry.
- Create written elements of public relations practice.

### **EDUC 1301: Introduction to the Teaching Profession**

An enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. The course provides students with opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations and provides students with support from college and school faculty, preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. Course content should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards; and the course must include a minimum of 16 contact hours of field experience in P-12 classrooms.

Learning Outcomes:

- Identify current issues influencing the field of education and teacher professional development.
- Analyze the culture of schooling and classrooms from the perspectives of language, gender, socioeconomic, ethnic and disability-based academic diversity and equity.
- Provide examples from classroom observations and course activities that demonstrate understanding of educational pedagogy and professional responsibilities of teachers.
- Evaluate personal motivations, educational philosophies and factors related to educational career decision making.
- Recognize the various multiple intelligences/learning styles in order to be able to implement instructional practices that meet the needs of all students.

### **EDUC 2301: Introduction to Special Populations**

An enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. The course provides students with opportunities to participate in early field observations of P-12 special populations and should be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Must include a minimum of 16 contact hours of field experience in P-12 classrooms with special populations.

Learning Outcomes:

- Describe the characteristics of exceptional learners (e.g. Learning Disabilities, Gifted and Talented), including legal implications.
- Describe and analyze characteristics of diverse learners (e.g. language, gender, sexual orientation, race, ethnicity) and how diversity impacts learning.
- Describe the impact of socio-economic status on learning and creating equitable classrooms.
- Demonstrate an understanding of the benefits and challenges of racial, ethnic and other types of cultural diversity in the classroom.

### **GEOG 1302: Human Geography**

This course introduces students to fundamental concepts, skills and practices of human geography. Place, space and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender and ethnicity.

Learning Outcomes:

- Demonstrate an understanding of key concepts and processes in human geography.
- Identify how cultural practices shape the landscape.
- Demonstrate an understanding of human/environment interactions.
- Describe and explain the importance and impact of globalization

### **HECO 1322: Nutrition & Diet Therapy**

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption and metabolism. Food safety, availability and nutritional information including food labels, advertising and nationally established guidelines are addressed.

Learning Outcomes:

- Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritious meals using nationally established criteria to meet recommended goals, and to evaluate food labels and the validity of nutritional claims.
- Trace the pathways and processes that occur in the body to handle nutrients and alcohol through consumption, digestion, absorption, transport, metabolism, storage and waste excretion.
- Discuss functions, sources, deficiencies and toxicities of macro- and micronutrients, including carbohydrates, lipids, proteins, water, vitamins and minerals.
- Apply the concept of energy balance and its influences at the physical, emotional, societal and cellular level to evaluate advantages and disadvantages of various methods used to correct energy imbalances.
- Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenics and supplements and relate them to fitness and health.
- Describe health and disease issues related to nutrition throughout the life cycle, including food safety, corrective dietary modifications and the influence of specific nutrients on diseases.

### **PHED 1164: Introduction to Physical Fitness & Wellness**

This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility and strength training.

#### Learning Outcomes:

- Describe how the components of physical fitness impact health and wellness.
- Explain the influence of personal behaviors and personal responsibilities on the development, treatment and prevention of hypokinetic diseases, infectious diseases, stress and addiction.
- Analyze the relationship between physical activity, inactivity and nutrition on weight and body composition.
- Plan, implement and evaluate a personal fitness program.
- Develop an appreciation and positive attitude for a healthy lifestyle and the effects of global trends on physical activity.

#### **PHED 1301: Foundations of Kinesiology**

The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science and sport. This course offers the student both an introduction to the knowledge base as well as information on expanding career opportunities.

#### Learning Outcomes:

- Distinguish between and identify terminology and research within the sub-disciplines in the field of Kinesiology and their application to diverse careers.
- Summarize the historical and philosophical approaches to physical activity, physical education, exercise science and sport.
- Identify the characteristics of a physically educated person and the importance of assessment and advocacy in physical education, exercise science and sport.
- Discuss how the changing nature of education and technological advances may influence physical education, exercise science and sport in the future.
- Identify major professional organizations, foundations and associations supporting physical activity at local, state, national and international levels as well as data tools and resources.

#### **PHED 1304: Personal/Community Health**

This course provides an introduction to the fundamentals, concepts, strategies, applications and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles and enhance individual well-being.

#### Learning Outcomes:

- Evaluate the dimensions of health and how they relate to personal and/or community wellness.
- Explain the importance of nutrition, a healthy lifestyle and staying physically active in preventing premature disease and promoting wellness.
- Describe the leading health problems, trends and needs of diverse populations.
- Identify major agencies, foundations and associations supporting health at local, state, national and international levels as well as data tools and resources.
- Evaluate sources of health information, including the internet, to determine reliability.
- Develop and implement a plan of healthy behavior to meet personal and community needs to enhance quality of life.

#### **PHED 1306: First Aid**

Instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or



sudden illness and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency.

Learning Outcomes:

- Explain the workings of the systems in the human body particularly those systems which are likely affected in emergency care.
- Recognize and meet the needs of emergency situations including, but not limited to, first aid care, emergency assistance, life support skills, EMS protocols, CPR and AED.
- Justify layperson and professional roles and responsibilities in emergency situation including, but not limit to, legal ramification, barriers to action, requirements for action and psychological responses.
- Explain and demonstrate skills for treating victims including, but not limited to, musculoskeletal injuries, bleeding, choking and environmental emergencies.
- Explain and demonstrate skills for respiratory distress including, but not limited to, CPR, rescue breathing, obstructed airway and usage of an AED device.
- Promote safety and preventative educational methods that reduce the risk of injury, accidents and life-style related diseases.

### **PHED 1308: Sports Officiating**

The purpose of the course is to study officiating requirements for sports and games with an emphasis on mechanics, rule interpretation and enforcement.

Learning Outcomes:

- Interpret and enforce contest rules in a variety of sports and games.
- Demonstrate officiating mechanics and techniques in a variety of sports and games for appropriate age and skill level.
- Develop a personal philosophy guided by rules, ethics and etiquette necessary to be an effective official.
- Apply problem solving techniques relevant to officiating a sports contest and how to maintain a positive self-image in a group contest environment.
- Assess and manage player, coach and spectator behaviors when officiating to provide a healthy sport environment.
- Identify governing bodies of various sports and procedures for becoming an official.

### **PHED 1346: Drug Use & Abuse**

Study of the use, misuse and abuse of drugs and other harmful substances in today's society. Physiological, sociological, pharmacological and psychological factors will be emphasized.

Learning Outcomes:

- Analyze the physiological, pharmacological and psychological effects of licit and illicit drugs, related to use, misuse and abuse including, but not limited to, alcohol, tobacco, performance enhancing, over-the-counter prescription and designer/synthetic drugs.
- Evaluate the sociological impact of drugs within the context of health literacy, recreational use, social implications, stereotypes, family dynamics and work environments.
- Articulate and apply behaviors related to personal responsibility including, but not limited to, healthy attitudes and behaviors, refusal skills, decision-making and risk-taking behavior.
- Compare and contrast how dependence and addiction occurs including, but not limited to, treatments and preventions strategies.

- Survey the historical influence on the drug-oriented society, sport and cultural beliefs and its bearing on personal drug behavior including, but not limited to, laws that arise related to substance use, misuse and abuse.

### **TECA 1303: Families, School & Community**

A study of the child, family, community and schools, including parent education and involvement, family and community lifestyles, child abuse and current family life issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Association for the Education of Young Children position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. The course includes a minimum of 16 hours of field experiences.

Learning Outcomes:

- Identify characteristics and issues relating to diverse cultures and caregiving lifestyles.
- Analyze ways in which factors in the home and community (e.g. parent expectations, availability of community resources, community issues) impact learning, including an awareness of social and cultural factors to enhance development and learning.
- Identify and apply strategies to maintain positive, collaborative relationships with diverse families (e.g. families with children with disabilities, poverty, single-parent, cultural, homelessness, dual-language learners)
- Investigate community/educational resources (e.g. dentist on wheels, library programs, GED programs, family education programs, Early Childhood Intervention Strategies) to empower families to support children's development.
- Recognize signs of abuse and neglect and describe ways to work effectively with abused and neglected children and their families.
- Explain the importance of family involvement/home-school relationships in education.
- Explain the importance of maintaining codes of ethical conduct and legal issues when working with families, colleagues and community professionals.

### **TECA 1311: Educating Young Children**

An introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the national Assessment of Education Progress position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences.

Learning Outcomes:

- Identify the features of a quality developmentally appropriate program for young children.
- Explain contributions of historical and contemporary professionals and theorists to the field of early childhood education.
- Analyze various early childhood programs and curricular models that have influenced practice.
- Describe current and future trends and issues in the field of education.
- Apply classroom observation and assessment skills to identify developmentally appropriate programs in diverse early childhood educational settings.

- Describe and adhere to professional code of legal and ethical requirements for educators.

### **TECA 1318: Wellness of the Young Child**

A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Assessment of Education al Progress position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences.

Learning Outcomes:

- Describe the relationship between health, safety and nutrition.
- Describe the basic principles of healthy behavior and guidance practices that influence health promotion, safe practices and disease prevention for young children.
- Analyze principles of nutrition and the application to nutritional assessment.
- Identify policy and regulatory requirements for nutrition.
- Describe the role of physical fitness as it contributes to healthy behavior.
- Evaluate and make recommendations for modifications of regulations regarding child's safety, safety procedures and children's environments for safety.
- Describe how physical, social and emotional environments influence a child's health.

### **TECA 1354: Child Growth & Development**

A study of the physical, emotional, social, language and cognitive factors impacting growth and development of children through adolescence.

Learning Outcomes:

- Summarize principles of growth and development.
- Identify typical stages of cognitive, social, physical, language and emotional development.
- Compare, contrast and apply theories of development in practice.
- Discuss the impact of developmental processes on educational practices.
- Identify the stages of play development (i.e. from solitary to cooperative) and describe the important role of play in young children's learning and development patterns.

Ferguson moved, seconded by Pullen to approve the updates to the ACGM courses. The motion carried.

## **HEALTH SCIENCES**

### **Radiography**

Becky Burton submitted a request to delete prerequisites from the following courses:

- RADR 2240: Sectional Anatomy for Medical Imaging
- RADR 2217: Radiographic Pathology
- RADR 2309: Radiographic Equipment

Norman moved, seconded by Pullen to approve the changes to the Radiography courses. The

motion carried.

**NURSING**  
**ADN**

Richard Pullen submitted a request to update prerequisites and/or corequisites for the following courses:

- RNSG 1301: Pharmacology  
Prerequisites: ~~RNSG 1209 and RNSG 1105~~  
Corequisites: ~~RNSG 1334~~ RNSG 1309 and RNSG 1105
- RNSG 1309: Introduction to Nursing  
Corequisites: RNSG 1105 and RNSG 1301
- RNSG 1105: Nursing Skills I  
Corequisites: RNSG 1309 and RNSG 1301
- RNSG 1331: Principles of Clinical Decision Making  
Prerequisites: RNSG 1309, RNSG 1105 and RNSG 1301  
Corequisite: RNSG 1362
- RNSG 1247: Concepts of Clinical Decision Making I  
Prerequisite: RNSG 1331 ~~and RNSG 1304~~  
Corequisite: RNSG 1263
- RNSG 1151: Care of the Childbearing Family  
Prerequisites: ~~RNSG 1227 and RNSG 1264~~ RNSG 1331 or admission to Transition (LVN to RN)  
Corequisite: RNSG 1160
- RNSG 2101: Care of the Children and Family  
Prerequisite: ~~RNSG 1151 and RNSG 1160~~ RNSG 1331 or admission to Transition (LNV to RN)  
Corequisite: RNSG 2160
- RNSG 1248: Concepts of Clinical Decision Making II  
Prerequisites: RNSG 1247 and ~~RNSG 1254~~ RNSG 1151 and RNSG 2101  
Corequisite: RNSG 2261
- RNSG 2213: Mental Health Nursing  
Prerequisites: ~~RNSG 1334~~ RNSG 1247, RNSG 1151 and RNSG 2101  
Corequisite: RNSG 2161
- RNSG 1227: Transition to Professional Nursing  
Corequisite: RNSG 1261 ~~and HPRS 2200~~

Edford moved, seconded by Goodman to approve the changes to the ADN nursing courses.  
The motion carried.

**STEM**  
**Engineering**

Collin Witherspoon and Mark Usnick submitted a request to add the following courses to the course inventory:

- COSC 1336: Programming Fundamentals I

This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays and the mechanics of running, testing and debugging. This course assumes computer literacy.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Describe how data are represented, manipulated, and stored in a computer.
- Categorize different programming languages and their uses.
- Understand and use the fundamental concepts of data types, structured programming, algorithmic design and user interface design.
- Demonstrate a fundamental understanding of software development methodologies, including modular design, pseudo code, flowcharting, structure charts, data types, control structures, functions and arrays.
- Develop projects that utilize logical algorithms from specifications and requirements statements.
- Demonstrate appropriate design, coding, testing and documenting of computer programs that implement project specifications and requirements.
- Apply computer programming concepts to new problems or situations.

- COSC1337: Programming Fundamentals II

Prerequisite: COSC 1336 – minimum grade of C

This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Identify and explain a programming development lifecycle, including planning, analysis, design, development and maintenance.
- Demonstrate a basic understanding of object-oriented programming by using structs and classes in software projects.
- Use object-oriented programming techniques to develop executable programs that include elements such as inheritance and polymorphism.
- Document and format code in a consistent manner.
- Apply basic searching and sorting algorithms in software design.
- Apply single- and multi-dimensional arrays in software.
- Use a symbolic debugger to find and fix runtime and logical errors in software.
- Demonstrate a basic understanding of programming methodologies, including object oriented, structured and procedural programming.
- Describe the phases of program translation from source code to executable code.

- COSC 2336: Programming Fundamentals III  
Prerequisite: COSC 1337 – minimum grade of C  
Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs) and algorithmic analysis.  
(3 sem hrs; 2 lec, 4 lab)  
Learning Outcomes:
  - To demonstrate the ability to write programs in C++
  - To demonstrate the different methods of organizing large amounts of data
  - To efficiently implement common data structures
  - To efficiently implement solutions for specific problems

Delete the following courses from the course inventory:

- COSC 1436: Programming Fundamentals I
- COSC 1437: Programming Fundamentals II
- COSC 2436: Programming Fundamentals III

Make the following changes to the Engineering Computer Science AS (ENGR.AS.COMPSC):

- Delete the following courses:
  - COSC 1436: Programming Fundamentals I
  - COSC 1437: Programming Fundamentals II
  - COSC 2436: Programming Fundamentals III
- Add the following courses:
  - COSC 1336: Programming Fundamentals I
  - COSC 1337: Programming Fundamentals II
  - COSC 2336: Programming Fundamentals III
- Delete the following choices:
  - MATH 2305: Discrete Mathematics
  - MATH 2318: Linear Algebra
  - MATH 2320: Differential Equations
- Delete the Optional Courses:
  - ENGR 2305: Electrical Circuits I
  - MATH 2320: Differential Equations
- Reduce program total from 68 to 60 semester hours

Davis moved, seconded by Goodman to approve the changes to the Engineering Computer Science courses and degree. The motion carried.

### **Computer Networking/Cyber Security**

Carol Buse submitted a request to add the following courses to the course inventory:

- ITCC 1301: Cisco Exploration I – Network Fundamentals

A course introducing the architecture, structure, functions, components and models of the internet. Describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link and physical layers. Covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations. Build simple LAN topologies by applying basic principles of cabling; perform basic configurations of network devices, including routers and switches; and implementing IP addressing schemes.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Identify and describe internet architecture, structure, functions, components, and models
  - Describe the use of OSI and TCP layered models; identify and describe the nature and roles of protocols and services at the application, network, data link, and physical layers
  - Describe principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations
  - Build simple LAN topologies by applying basic principles of cabling, device configuration, and IP subnetting.
- ITCC 1304: Cisco Explorations 2 – Routing Protocols and Concepts

Prerequisite: ITCC 1301

This course describes the architecture, components and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Describe the purpose, nature and operations of a router
  - Describe the purpose and nature of routing tables
  - Describe the purpose and procedure of configuring static routes
  - Design and implement a classless IP addressing scheme for a given network
  - Describe the basis features and concepts of link-state routing protocols
  - Configure and verify basic RIPv1, RIPv2, single area OSPF, and EIGRP operations in a small routed network.
- ITCC 2308: Cisco Explorations 3 – LAN Switching and Wireless

Prerequisite: ITCC 1304

This course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Detailed explanations of LAN switch operations, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing and wireless network operations. Analyze, configure, verify and troubleshoot VLANs, RSTP, VTP and wireless networks. Campus network design and Layer 3 switching concepts are introduced.

Learning Outcomes:

- Identify and correct common network problems at layers 1, 2, 3, and 7 using a layered model approach
- Select the appropriate media, cables, ports, and connectors to connect switches to other devices and hosts
- Perform and verify initial switch configuration tasks including remote access management
- Configure, verify and troubleshoot VLANs, VLAN Trunking, Inter-VLAN routing, VTP, and RSTP
- Verify network status and switch operation using basic utilities (ping, traceroute, telnet, SSH, arp, ipconfig)
- Identify and describe the purpose of the components in a small wireless network (SSID, BSS, ESS)
- Identify the basic parameters to configure on a wireless network to ensure that devices connect to the correct point

- ITCC 2310: Cisco Exploration 4 – Accessing the WAN

Prerequisite: ITCC 2308

This course explains the principles of traffic control and access control lists (ACLs) and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and discovers how to implement and configure Point-to-Point Protocol (PPP), Point-to-Point Protocol over Ethernet (PPPoE), DSL and Frame Relay. WAN security concepts, tunneling and VPN basics are introduced. Discuss the special network services required by converged applications and an introduction to quality of service (QoS).

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Describe the impact of applications (Voice Over IP and Video Over IP) on a network
  - Implement basic switch security (port security, trunk access, management vlan other than vlan1, etc.)
  - Configure, verify and troubleshoot DHCP and DNS operation on a router (CLI/SDM)
  - Describe today's increasing network security threats and explain the need to implement a comprehensive security policy to mitigate the threats
  - Configure and apply ACLs based on network filtering requirements (CLI/SDM)
  - Configure and apply an ACLs to limit telnet and SSH access to the router using (SDM/CLI)
  - Configure NAT for given network requirements using (CLI/SDM)
  - Configure and verify a basic WAN serial connection
  - Configure and verify Frame Relay on Cisco routers
  - Describe VPN technology (importance, benefits, role, impact, components).
- ITDF 2325: Digital Forensic Tools
- Prerequisite: ITDF 1300



Skills-based course in the applications of forensic analysis software. Tools used in this course may include EnCase, ILook, Forensic Tool Kit, write blockers, StegAlyzerSS, "X-Ways", ProDiscover Basic and others.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Demonstrate data collection from digital devices using multiple forensic-based tools
  - Demonstrate methods of detecting digital information concealed or protected by steganography, encryption, and other methods
  - Utilize "hashing" and other digital means to identify files and verify the accuracy of digital copies of original evidence
  - Present a report of forensic analysis and findings.
- ITSY 1391: Special Topics in Information Technology/Security  
Topics address recently identified current events, skills, knowledges and/or attitudes and behaviors pertinent to the information security technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Learning outcomes/objectives are determined by local occupational need and business industry trends.
- ITSY 2330: Intrusion Detection  
Prerequisite: ITSY 2300  
Computer information systems security monitoring, intrusion detection and crisis management. Includes alarm management, signature configuration, sensor configuration and troubleshooting components. Emphasizes identifying, resolving and documenting network crises and activating the response team.

(3 sem hrs; 2 lec, 4 lab)

Learning Outcomes:

- Build IDS sensors and attach them to the network (hardware and software)
- Install and manage a secure communication link between all sensors and the monitor
- Install and manage event database(s)
- Analyze an event and trends
- Install, manage and interpret syslog servers and system logs
- Identify legal and policy issues associated with system and network monitoring
- Deploy, implement and test IDS security plan.

Remove the prerequisites from the following course:

- ITDF 1300: Introduction to Digital Forensics  
~~Prerequisites: CPMT 1351 and ITSY 1342~~

Delete the following courses from the course inventory:

- ITCC 1401: Cisco Exploration I – Network Fundamentals
- ITCC 1404: Cisco Explorations 2 – Routing Protocols and Concepts
- ITCC 2408: Cisco Explorations 3 – LAN Switching and Wireless
- ITCC 2410: Cisco Exploration 4 – Accessing the WAN
- CPMT 1443: Microcomputer Architecture
- ITNW 1316: Network Administration
- ITSY 1400: Fundamentals of Information Security

Kee moved, seconded by Edford to approve the changes to the Computer Networking/Cyber Security courses. The motion carried.

Carol Buse submitted a request to make the following changes to the Computer Networking/Cyber Security AAS degree (CETT.AAS.NT):

- Move BCIS 1305: Business Computer Applications from Major Course Requirements to the Social/Behavioral Science requirement.
- Delete the following courses from the Major Course Requirements:
  - ITCC 1401: Cisco Exploration I – Network Fundamentals
  - ITCC 1404: Cisco Explorations 2 – Routing Protocols and Concepts
  - ITCC 2408: Cisco Explorations 3 – LAN Switching and Wireless
  - ITCC 2410: Cisco Exploration 4 – Accessing the WAN
  - ITSY 2317: Wireless Security Development
  - ITCC 2359: Advanced Voice Over Internet Protocol (VoIP)
- Add the following courses to the Major Course Requirements:
  - ITCC 1301: Cisco Exploration I – Network Fundamentals
  - ITCC 1304: Cisco Explorations 2 – Routing Protocols and Concepts
  - ITCC 2308: Cisco Explorations 3 – LAN Switching and Wireless
  - ITCC 2310: Cisco Exploration 4 – Accessing the WAN
  - ITSY 2330: Intrusion Detection
  - ITDF 2325: Digital Forensics Tools
- Make the following changes to the Related Course Requirements:
  - Delete HMSY 1337: Introduction to Homeland Security
  - Delete HMSY 1342: Understanding and Combating Terrorism
  - Add BUSI 2301: Business Law
  - Add CRIJ 2314: Criminal Investigation
- Reduce the total from 67 to 60 semester hours

Edford moved, seconded by Wetzel to approve the changes to the Computer Networking/Cyber Security AAS program. The motion carried.

Carol Buse submitted a request to deactivate the following certificates:

- Computer Networking/Cyber Security Professional Certificate (CETT.CERT.PRO)
- Computer Networking Certificate (CETT.CERT.NETWORK)

And add the following certificates:

- Computer Network Essentials Certificate (15 semester hours)
 

This certificate provides students with a basic knowledge of maintaining and managing small networks. Courses utilize hands-on labs and aid the student in preparing to take the following certification exams: CompTIA A+, CompTIA Network +, CompTIA Security+, Cisco CCENT. This certificate leads to an AAS in Computer Networking/Cyber Security or an AAS in Computer Information Systems, SSN option.

  - CPMT 1351: IT Essentials, PC Hardware and Software
  - ITSY 1342: Information Technology Security
  - ITCC 1301: Cisco Exploration I Network Fundamentals
  - ITCC 1304: Cisco Exploration 2 Routing Protocols and Concepts
  - ITSC 1307: Unix Operating System I
  
- Computer Network Administration Certificate (27 semester hours)
 

This certificate prepares students to design and implement, monitor and maintain a computer network, customize and optimize software, and handle routine hardware/software maintenance. Courses utilize hands-on labs and aid the student in preparing to take the following certification exams: CompTIA A+, CompTIA Network +, CompTIA Security+, CompTIA server +, Cisco CCENT, Cisco CCNA, CAP. This certificate leads to an AAS in Computer Networking/Cyber Security.

  - CPMT 1351: IT Essentials, PC Hardware and Software
  - ITSY 1342: Information Technology Security
  - ITCC 1301: Cisco Exploration I Network Fundamentals
  - ITCC 1304: Cisco Exploration 2 Routing Protocols and Concepts
  - ITSC 1307: Unix Operating System I
  - CPMT 2349: Advanced Computer Networking Technology
  - ITCC 2308: Cisco Exploration 3 LAN Switching and Wireless
  - ITCC 2310: Cisco Exploration 4 Accessing the WAN
  - ITSY 2300: Operating System Security
  
- Digital Forensics Certificate (15 semester hours)
 

This certificate targets individuals who wish to learn how to gather and report electronic data for analysis of computer security breaches, criminal and civil investigations or other legal purposes. This certificate leads towards and AAS in Computer Networking/Cyber Security.

  - BUSI 2301: Business Law
  - CRIJ 2314: Criminal Investigation
  - ITDF 1300: Digital Forensics
  - ITDF 2325: Digital Forensics Tools
  - ITSC 1307: Unix Operating System
  - Or
  - ITSC 2335: Application Software Problem Solving
  
- Cyber Security Certificate (30 semester hours)

This certificate prepares individuals to secure their computer systems, networks and design and implement corporate security strategies. Courses utilize hands-on labs and aid the student in preparing to take the following certification exams: CompTIA A+, CompTIA Network +, CompTIA Security+, CAP and CISSP. This certificate leads towards an AAS in Computer Networking/Cyber Security.

- BUSI 2301: Business Law
- CRIJ 2314: Criminal Investigation
- ITDF 1300: Digital Forensics
- ITDF 2325: Digital Forensics Tools
- ITSC 1307: Unix Operating System
- CPMT 1351: IT Essentials: PC Hardware and Software
- ITSY 1342: Information Technology Security
- ITSY 2300: Operating System Security
- ITSY 2330: Intrusion Detection
- ITSY 2341: Security management Practices

Goodman moved, seconded by Edford to approve the changes to the Computer Networking/Cyber Security certificates. The motion carried.