Amphitheater School District
COURSE REQUEST FORM

I. RATIONALE – justification of need, citing data

The proposal for HCA 119- Orientation to Human Anatomy and Physiology and Dual Enrollment (DE) arises from the imperative to provide students with more extensive exposure to healthcare foundations, offering equitable access to 3 college course credits compared to the current 1 credit in HRP 100. HCA 119 will be integrated into the current Healthcare Foundations curriculum. The expansion of this Career and Technical Education (CTE) course allows for a broader focus, not exclusively on nursing but encompassing various healthcare career paths. At Ironwood Ridge High School, a significant portion of students (60-75% in HRP 100) express interest in health sciences beyond nursing, emphasizing the necessity for HCA 119, which accommodates diverse career aspirations.

II. DESCRIPTION – course goals and objectives, pre-requisites, format

Orientation to Human Anatomy and Physiology provides an orientation to basic anatomy and physiology relevant to the healthcare setting, covering the structural organization of the human body, body systems, major organs, common pathology, and CLIA waived testing. The course objectives include understanding the organizational structure of the human body, discussing normal physiology and mechanisms maintaining homeostasis, identifying and describing diseases, and exploring methods of detection, treatment, and prevention.

III. ARTICULATION – reference to state standards, specific skills sets, and articulation with other courses

The addition of Orientation to Human Anatomy and Physiology allows students to receive 3 college credits, due to the instructor's eligibility to teach the course as a Dual Enrollment (DE) course. With a focus on advanced degrees, teaching experience at the college level, and ongoing professional development, the instructor meets the eligibility requirements. These measures will fortify the foundation for delivering a successful DE course in HCA 119. The instructor's (Karen Brown) eligibility to teach this course as a DE course is outlined below:

- MSN in Education
- Director of Nursing Assistant Home
- 19+ years of instructor experience, in nursing, at the collegiate level. The institutions where the instructor previously taught nursing courses were Mission College in Santa Clara and Pima Community College.

The following performance objectives are covered in HCA 119 as outlined by Pima Community College:

1. Describe the structural organization of the human body beginning with cells, tissues, organs, and organ systems concluding with a human being.
2. Identify and describe the function and interdependencies among body systems to maintain homeostasis.
3. Identify common pathophysiological signs, symptoms, and etiologies for common diseases.
4. Describe CLIA waived testing and analysis used in an ambulatory care setting to detect common diseases to determine treatment modalities.
5. Describe all body systems, the changes to structure and function, and implications associated with changes across the lifespan.

The following CTE Nursing Services Technical Standards will be covered in HCA 119:

STANDARD 3.0 APPLY STANDARD PRECAUTIONS AND INFECTION CONTROL MEASURES

3.1 Explain the infectious process and modes of disease transmission

3.2 Examine the Center for Disease Control (CDC) and Prevention guidelines related to body substances and Standard Precautions (e.g., respiratory hygiene, exposure incidents, and transmission-based precautions)

3.3 Examine the Occupational Safety and Health Administration (OSHA) guidelines related to body substance and Standard Precautions (e.g., bloodborne pathogen and methods for reducing infection)

3.4 Explain the general principles of asepsis (e.g., clean, medical, sterile, and disinfection)

3.5 Demonstrate the principles of hand hygiene

STANDARD 6.0 EXAMINE HUMAN BODY SYSTEMS FOR COMMON CONDITIONS, DISORDERS, AND CARE

6.1 Describe the characteristics of homeostasis

6.2 Describe major body systems, organs, cell functions, anatomical terms, and tissues (e.g., nervous, connective, muscular, and epithelial)

6.3 Use medical terminology as it relates to body systems and their functions

6.4 Identify the function, structure, common health problems, and age-related changes of the integumentary system (e.g., bruises, skin tears, rashes, decubitus ulcers, shingles, lice/scabies, and gangrene)

6.5 Identify the function, structure, common health problems, and age-related changes of the musculoskeletal system (e.g., arthritis, osteoporosis, fractures, amputations, muscle atrophy, and joint replacement)

6.6 Identify the function, structure, common health problems, and age-related changes of the nervous system (e.g., cerebral vascular accident, Parkinson's disease, dementia/Alzheimer's, spinal cord/head injuries, seizures, and multiple sclerosis)

6.7 Identify the function, structure, common health problems, and age-related changes of the sensory system (e.g., cataracts, glaucoma, macular degeneration, hearing loss, and neuropathy)

6.8 Identify the function, structure, common health problems, and age-related changes of the circulatory system (e.g., angina, myocardial infarction, coronary disease, congestive heart failure, and hypertension)

6.9 Identify the function, structure, common health problems, and age-related changes of the respiratory system (e.g., COPD, bronchitis, asthma, TB, pneumonia, and oxygen therapy)

6.10 Identify the function, structure, common health problems, and age-related changes of the gastrointestinal system (e.g., constipation/fecal impaction, gastroesophageal reflux disease, ulcers, hernias, gall bladder disease, diverticulitis, colon cancer, Crohn's disease, and celiac disease)

6.11 Identify the function, structure, common health problems, and age-related changes of the urinary system (e.g., renal failure, urinary tract infection, incontinence, and kidney stones)

6.12 Identify the function, structure, common health problems, and age-related changes of the endocrine system (e.g., diabetes

mellitus and thyroid disease)

6.13 Identify the function, structure, common health problems, and age-related changes of the reproductive system [e.g., BPH, prolapsed uterus, cancer, pregnancy-related conditions, endometriosis, and sexually transmitted disease/infection (STD/STI)]

STANDARD 15.0 ASSIST WITH DIAGNOSTIC TESTING AND EXAMINATIONS

15.1 Determine purpose and procedure for collection, labeling, and sending specimen for analysis according to protocol (e.g., sputum, stool, urine, and blood)

15.2 Determine purpose and procedure for diagnostic testing (e.g., culture and sensitivity, clean catch, sterile, and 24-hour)

IV. AUDIENCE – student group (school, grade, discipline) to be served

Healthcare foundations with the embedded HCA 119- Orientation to Human Anatomy and Physiology, targets students in grades 10-12 who are interested in healthcare-related professions, catering to the diverse range of career aspirations within the field.

V. RESOURCES – specific texts, materials, equipment needed

Required materials will be determined by Pima Community College.

VI. OUTCOME – evaluation of course effectiveness

HCA 119- Orientation to Human Anatomy and Physiology is anticipated to boost Technical Skills Assessment (TSA) scores for the Nursing program due to comprehensive coverage. Additionally, the course promises increased exposure to various healthcare disciplines, fostering equitable opportunities for a diverse student population.

VII. IMPLEMENTATION – timeline to include pilot phase and annual evaluation of proposed course

Pilot Phase of Orientation to Human Anatomy and Physiology:

Beginning in the 2024-2025 school year, two periods of HCA 119 will be offered to 10th-12th graders. It will be embedded in Healthcare Foundations. HCA 119 will be replacing the HRP 100 component of the course. Students will now receive 3 DE credits instead of the previous 1 credit. HCA 119 allows for more hands-on experiences for students and enhances their understanding of the standards offered.

Course Outline:

I. Human Body's Structural Organization
II. Body Systems Identified
III. Describe:
    A. Body planes
    B. Directional terms
    C. Quadrants
    D. Body cavities

IV. Body System's Major Organs

V. Anatomical Location of Each Body System's Major Organs

VI. Human Body's Structure and Function Across the Life Span

VII. Each Body System's Normal Function

VIII. Each Body System's Common Pathology, Including:

A. Signs
B. Symptoms
C. Etiology

IX. Each Body System's Pathology, Including:

A. Diagnostic Measures
B. Treatment Modalities

X. Disease Processes and Indications for CLIA Waived Tests (Associated with Common Diseases)

Annual Evaluation:

An annual evaluation of HCA 119- Orientation to Human Anatomy and Physiology will take place through data analysis of students' projects and assessments.

Students who complete the second year of the CTE program will exhibit understanding of the content as evidenced by the Technical Skills Assessment data.

VIII. PROCESS – how teachers, parents, and students (when appropriate) were included in the decision making process

Students have requested a course such as HCA 119- Orientation to Human Anatomy and Physiology for three years. They have expressed interest in a more hands-on course than HRP 100, which is mostly asynchronous, on the computer. HCA 119 provides students with more interaction with the instructor and real world applications to the standards they are being taught.

APPROVAL: _____ **2/29/2024** _____

Principal **date** **Superintendent Designee** **date**

(NOTE: Must be submitted for Governing Board approval prior to the end of the current school year for implementation during the following school year.)