Transmittal Memo

The purpose of this action is to establish certificate programs in Computed Tomography (CT) and Magnetic Resonance Imaging (MRI).

This proposal was approved by the School of Speech Pathology and Audiology; and is seeking approval from the College of Education, Health, and Human Services; and the university’s Educational Policy Council for implementation in fall 2008.

## Proposal Summary

**Title:** Establishment of Certificate programs in Computed Tomography and Magnetic Resonance Imaging concentrations in the Radiologic and Imaging Sciences major.

**Subject Specification**: The intent of this proposal is to establish certificate programs in Computed Tomography and Magnetic Resonance Imaging in the Radiologic and Imaging Sciences (RIS) major.

### Background Information

Description and Rationale:

The Computed Tomography (CT) and the Magnetic Resonance Imaging (MRI) concentrations are currently part of the Bachelor of Radiologic and Imaging Sciences Technology degree offered at the Salem Campus. Two options exist: Option One is for graduates of an associate of applied science degree in radiologic technology as their point of entry. Option Two is for graduates from a hospital-based program who receive 32 credits toward their associate of technical studies degree. Requirements for the Bachelor in Radiologic and Imaging Sciences Technology degree include completion of the AAS or the ATS degree in radiologic technology, Liberal Education Requirements, electives, CT or MRI courses and a Writing Intensive Course.

Some students have requested to complete the CT or MRI courses without completing the remainder of the bachelor degree requirements. The certificate in CT or MRI would accommodate these students. The certificate would still enable them to complete requirements for the national certification exam in CT or MRI and to seek employment. This is due to the fact that a student completes the content specifications of the certification exam plus clinical competencies at a designated clinical site under the supervision of a practicing technologist. Most of these students state they would return at a later time in their professional career to complete bachelor degree requirements.

This certificate would also provide an option for those nuclear medicine technologists without a radiologic technology background who are interested in learning Computed Tomography for a better understanding of Positron Emission Tomography (PET) scanning that is now being fused with Computed Tomography (CT).

In 2006-2007, there were six CT students and eight MRI students enrolled so this action will not impact large amounts of students. However, the certificate is attractive to some students who wish to advance the career ladder in radiology, learn advanced procedures and serve patients in a new manner.

Certificate programs normally contain between 15 and 25 credit hours of coursework from the existing inventory. The total hours for the CT certificate are 22 hours while the MRI hours are at 27. These hours in the MRI program are slightly over the normal certificate program but are necessary for students to complete the didactic and clinical requirements for the MRI certification examination as sponsored by the American Registry of Radiologic Technologists.

The certificate requested would be categorized as: **Postsecondary (one to two academic years):** Requires completion of an organized program of study at the postsecondary level (below the baccalaureate) in at least one but less than two full-time equivalent academic years. (Banner code is C2xx.). Students are completing a radiologic technology or nuclear medicine program prior to entry into the certificate program.

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The courses that would comprise the CT Certificate include:

**Course No. Credits Semester**

RIS 34084 CT/MRI Sectional Anatomy I 2 Fall

RIS 44021 Patient Management in CT 3 Fall

RIS 44024 Physical Principles of CT 3 Fall

RIS 44025 CT Clinical Education I 3 Fall

RIS 34086 CT/MRI Sectional Anatomy II 2 Spring

RIS 44022 CT Procedures 3 Spring

RIS 44027 CT Clinical Education II 3 Spring

#### RIS 44083 Pathophysiology for Medical Imaging 3 Spring

**Total Credit Hours 22**

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The courses that would comprise the MRI Certificate include:

**Course No. Credits Semester**

RIS 34084 CT/MRI Sectional Anatomy I 2 Fall

RIS 44031 Patient Management in MRI 3 Fall

RIS 44032 MRI Procedures I 2 Fall

RIS 44034 MRI Equipment & Image Acquisition I 2 Fall

RIS 44035 MRI Clinical Education I 3 Fall

RIS 34086 CT/MRI Sectional Anatomy II 2 Spring

RIS 44033 MRI Procedures II 2 Spring

RIS 44036 MRI Clinical Education II 3 Spring

RIS 44039 MRI Equipment & Image Acquisition II 2 Spring

#### RIS 44083 Pathophysiology for Medical Imaging 3 Spring

RIS 44037 MRI Clinical Education III 3 Summer

**Total Credit Hours 27**

Students would follow Kent State University admission requirements as well as the RIS program requirements. Students must submit an application to the CT or MRI program. Students must declare themselves as certificate candidates prior to completing one-half of the required course work, and must complete a minimum of 15 hours at Kent State University.

Students must satisfy the prerequisites of the CT or MRI program as seen in the CT/MRI Application Packet with a minimum of a 2.50 cumulative grade point average.

Students must pass each course with a minimum grade of “C” to receive the certificate but must maintain a cumulative grade point average of 2.75 in the RIS courses. Students must also complete all clinical education courses including all required clinical competencies. RIS Courses may be taken credit by examination with permission but may not be completed on a pass/fail basis.

The offering of a certificate will have no impact on faculty load of the adjunct faculty teaching these courses. The certificate incorporates existing courses within the RIS inventory.

###### Specific Recommendation

It is recommended that these two certificates be approved for implementation in fall 2008.

See the attached requirement sheets for CT and MRI.