



10/30/2018

To: The Ohio State University Council on Academic Affairs

The School of Health and Rehabilitation Sciences curriculum committee met on 10/17/2018 to review the Radiologic Sciences and Therapy Online Bachelors of Science (BS) Degree Completion - Administration/Management Track curriculum. The curriculum reflects the development of an on-line option for an existing Radiologic Sciences and Therapy Bachelors of Science (BS) Degree Completion curriculum. After discussion and revision, the committee voted to approve curriculum described above (5 of 7 eligible members voted; 5 in favor, 0 opposed, 1 abstain, 2 absent). Thank you.

Sincerely,

Sarah M. Varekojis, PhD, RRT
Chair, School of Health and Rehabilitation Sciences curriculum committee
Associate Professor and Director of Clinical Education
Respiratory Therapy Division



THE OHIO STATE UNIVERSITY

**School of Health &
Rehabilitation Sciences
Radiologic Sciences & Therapy**
453 West Tenth Avenue
340 Atwell Hall
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<http://medicine.osu.edu/hrs/rd/>

November 30, 2018

Deborah S. Larsen, PhD, FAPTA, FASAHP
Professor and Director,
School of Health and Rehabilitation Sciences
Associate Dean, College of Medicine
Associate Vice President, Health Sciences
453 W. 10th Ave.
Columbus, OH 43210

Dear Dr. Larsen,

I would like to request that the HRS curriculum committee and CAA approve a request to transition our existing Degree Completion curriculum and courses, offered to Associate of Science (AS) Radiologic Science students, to a completely online format. Our AS to BS Radiologic Sciences curriculum was first piloted in 1973 by the Assistant Professor Emeritus, Philip Ballinger. Dr. Ballinger believed that all AS degree radiographers (credentialed to practice) should complete the entire BS program in our Division. This meant that they had to repeat professional courses, except clinical internships. This option was rarely used by AS radiographers because it usually meant they could not work and complete their degree. When I began as the Division Director in 2004, I wanted to revise this offering drastically to make it more attractive to AS radiographers, working in the Medical Center. The program allows AS radiographers who are credentialed and in good standing with the national board exam to forgo repeating previous course in radiography. If applicants meet the threshold grade point average of > 2.50/4.0, they are accepted and begin taking OSU courses to meet the residency requirement. Since many need OSU credit, the Division offers advanced imaging courses such as MRI, CT, mammography, and other specializations, coupled with general education (GE) course work. The Degree Completion educational option has been successful as at least 8 AS radiography and sonography students have completed their BS degree with us consistently per year for the last 5 years.

In order to provide even more flexibility and increase enrollment, we would like to provide a completely online curriculum that would allow working radiographers, sonographers, and radiation therapists to obtain their BS degree. As we have presented our current curriculum to Columbus State and COTC radiography classes, we have found a significant demand for the convenience of online education. It is for this reason that we partnered with OSU's ODEE department to get a market analysis of our competitors. Through the process, we identified a niche that is not currently filled by other programs. This information provided us with the ability to redesign our summative curriculum offering that does offer online OSU GE but is not coupled with professional courses that focus on the supervision of the imaging department. The Association of Hospital Radiology Administrators (AHRA) now provides a credentialing exam for supervisors in imaging so this is now the focus of both the selection of our GE and our professional course work. We hope to not only give AS students an online format for a BS education but also to prepare them for the credential exam offered by the AHRA.

The faculty, ODEE, and I have worked hard to design a new curriculum with this innovative focus but simultaneously provides those AS imaging students the flexibility of online coursework. We are providing a set of documents that we would like to have reviewed and approved so that ODEE can assist us in transforming some of our existing face-to-face course offerings to solely distance education options. We appreciate all the support and encouragement that we have received as this project has developed through 2018.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Kevin D. Evans". The signature is fluid and cursive, with the first name "Kevin" being the most prominent part.

Kevin D. Evans, PhD, RT(R) (M) (BD), RDMS, RVS, FSDMS, FAIUM
Professor
Radiologic Sciences and Respiratory Therapy Division, Director
The Ohio State University
School of Health & Rehabilitation Sciences
453 W. 10th Avenue
340 A. Atwell Hall
Columbus, OH 43210-2205

Narrative to accompany the Radiologic Sciences AS-BS degree completion program-online

Kevin D. Evans, PhD

As briefly outlined in the Division Director support letter, the existing option to pursue a BS after completing an AS in the Radiologic Sciences (at a community college) is contingent on being successfully admitted to The Ohio State University (OSU) and then admitted to the major. Our Division's admissions process begins by reviewing AS radiographers, sonographers, or radiation therapists who are credentialed and in good standing with the national board exam. We believe if the applicant was successful in passing the national certification examination in their profession (radiography, sonography, or radiation therapy), then repeating those foundational courses is not necessary. We accept the core career preparation provided by the associate degree granting college. Next, the applicants must meet the threshold grade point average of > 2.50/4.0. We also require 3 letters of recommendation from supervisors or managers in their department. Once admitted to our AS-BS degree completion program, an advisor is assigned to determine any General Education (GE) courses that have not been met as outlined by OSU. Once a GE plan is devised, the student can begin taking OSU courses to meet the residency requirement.

The admitted AS radiologic science student is provided with a CAP sheet that outlines the residency requirement. Thirty credit hours must be completed at OSU to establish residency for graduation. Remedial, conditional, and repeated coursework do not count towards the minimum hours for graduation or residency. With as many AS credits that can be mapped onto the CAP sheet/GE required courses (representing Year 1 and Year 2), the plan revolves around completing the required courses in Year 3 and Year 4, while finishing uncompleted GEs.

The current AS-BS degree completion CAP sheet lists face-to-face courses at OSU and also requires that students select an advanced imaging specialty (Computed Tomography, Magnetic Resonance Imaging, Mammography, Administration & Quality Management, Radiologic Science Education, or Vascular Interventional Radiography). These practicum courses consist of 1 credit hour of lecture each week and an additional 1-3 (total of 4 credits) for the associated time in clinical placement or student teaching. Local AS students often had their current workplace sponsor them for clinical placement hours in CT, MRI, Mammo, or VIR. Although popular options as it affords the students the ability to sit for an advanced clinical credentials as well as earn their BS degree, the ability to expand this program was limited by clinical sites. **The face-to-face AS to BS specialty track options will remain in place for local students. We are proposing an online only option that allows students from across the country to complete their BS in Radiologic Sciences and Therapy. This track will be titled: AS to BS Degree Completion: Administration/Management Program.**

The Office of Distance Education and eLearning (ODEE), conducted a market analysis of our online competitors. Through the process, we identified a niche that is not currently filled by other programs. This information provided us with the ability to redesign our AS-BS degree completion CAP sheet so that we are proposing to offer online OSU GEs and only offer professional courses that focus on administration of the imaging department. The Association for Medical Imaging Management (AHRA) now provides a credentialing exam for supervisors in imaging. The proposed online only "AS to BS Degree Completion: Administration/Management Program" focuses on preparing students to sit for the AHRA exam through the selection of exclusively online GE and our professional course work. We hope to not only give AS students an online format for a BS education but also to prepare them for the Certified Radiology Administrator credential: <http://www.ahra.org/cra> Part of the CRA requirement is to have completed a mentored project which is the focus of our new RS online courses in Year 4- Fall &

Spring semester (see CAP sheet). The mentored project course will be guided by OSU RS faculty as well as a workplace employer/mentor.

We look forward to working with ODEE to implement our approved "AS-BS Degree Completion Program: Administration/Management" to facilitate increased accessibility of a high quality online educational experience that not only culminates in a BS degree but will prepare them for a credential as a Certified Radiology Administrator.



The School of Health and Rehabilitation Sciences

Degree Completion

Radiologic Sciences and Therapy

The School of Health and Rehabilitation Sciences (SHRS) is a School in The Ohio State University College of Medicine. The School is nationally recognized as a leader in practice-based health care education. For more than five decades, the School has prepared students to achieve personal and professional excellence, as they pursue an exciting career in healthcare.

PROGRAM OVERVIEW

The AS to BS Degree Post Primary Certification program is designed for individuals holding a certification in radiography, radiation therapy, nuclear medicine technology, or sonography from the American Registry of Radiologic Technologists (ARRT), the Nuclear Medicine Technology Certification Board (NMTCB), or the American Registry of Diagnostic Medical Sonography (ARDMS) who would like to continue their education to the baccalaureate level focusing on primary certification through the ARRT. This program requires each student to choose one post primary area of specialization including one of the following: computed tomography (CT), magnetic resonance imaging (MRI), mammography, vascular interventional radiology, or quality management/administration. *Students interested in specializations that are not within the usual scope of practice of their primary area of certification should follow the traditional Radiologic Sciences and Therapy curriculum for their new area of interest.*

ADMISSION & APPLICATION PROCEDURES

Applicants must meet the following minimum requirements and submit requested materials to be considered for admission. The application deadline for **Summer 2019** is **January 31st, 2019**. The professional program will begin **August 2019**.

1. An electronic application is available online at gpadmissions.osu.edu which must be completed and submitted with all required supplemental documents, if applicable.
2. A minimum 2.50 cumulative GPA is required in all coursework taken at all accredited institutions. All post-secondary coursework is considered. Although a 2.5 GPA is the minimum, the average GPA is higher.
3. Completion of all prerequisite courses or their equivalents with a **C- or higher by the end of spring semester, 2019**.
4. Three letters of recommendation (one addressing your academic experience, one addressing your clinical experience, and one addressing your personal attributes) must be mailed to: SHRS Admission Office / 206 Atwell Hall / 453 W. 10th Ave. / Columbus, OH 43210.

DEGREE REQUIREMENTS

The minimum total hours to graduate from The Ohio State University is 120 semester hours. The program requires a minimum of 120 hours barring special circumstances. This includes all general graduation requirements, general education curriculum, program prerequisites, and professional curriculum. **Thirty credit hours** must be completed at The Ohio State University to establish residency for graduation. Remedial, conditional, and repeated coursework do not count towards the minimum hours for graduation or residency.

GENERAL EDUCATION

SHRS students are encouraged to complete all General Education (GE) before applying to the AS to BS Degree Completion Program. Some of these requirements overlap with program prerequisites or professional curriculum courses. The required course work is listed below:

Writing (6 hours)	Math (4-5 hours)	Art (3 hours)	Historical Study or Culture & Ideas (3 hours)
Data Analysis (3 hours)	Literature (3 hours)	Science (10 hours)	Social Diversity in the US (0-3 hours)
Social Science (6 hours)	Global Studies (0-6 hours)	Historical Study (3 hours)	Open Options (6 hours)

PROGRAM PREREQUISITES (18 SEMESTER HOURS INCLUDING COURSES COUNTED AS GE HOURS ^{GE})

Students who wish to apply to the AS to BS Degree Completion Program must have completed all of the following program prerequisite courses or their equivalent with a C- or higher by the end of spring semester, 2019. In addition to the courses below, applicants must have taken a college course in Chemistry and Biology.

Math 1148 ^{GE} EEOB 2520 ^{GE} Anatomy 2300.04 or 3300 ^{GE}

SUGGESTED SCHEDULING PLAN

The following plan demonstrates how students may complete the Radiologic Sciences & Therapy Online BS Degree Completion program in 5 terms. The timeline will vary depending on the amount of GEs the student needs to complete. It is assumed that students following this plan who are admitted to the program will begin professional coursework autumn term of their first year of enrollment at Ohio State.

HOW TO APPLY

1. Apply to the University via the Admissions Office
2. Apply to the School of Health and Rehabilitation Sciences via Professional Admissions to the Division of Radiologic Sciences and Therapy AS to BS Degree Completion Program

The course offerings are a tentative plan and subject to change.

YEAR 1	YEAR 2
<p><i>Autumn</i> STATS 1350 – Elementary Statistics (3) ^{GE} GE (3-6)</p> <p style="text-align: right;">***Total (6-9)</p>	<p><i>Autumn</i> HTHRHC 5900- Health Sciences Research: Interpretation and Applications (3) Adv. Radiography Practicum Choose One (3): o RadSci 5089-CT Practicum o RadSci 5189-MRI Practicum o RadSci 5289 – Mammography o RadSci 5489 – Rad Sci Education o RadSci 5589-Vascular Intervention</p> <p>OR: (the following 2 classes) o HTHRHC 5300- Management Principles and Human Resources for Health Care Professionals (3) o HTHRHC 4193 - Ind. Study: Project proposal (1)</p> <p style="text-align: right;">***Total (6-7)</p>
<p><i>Spring</i> HTHRHC 5500 – Introduction to Pathophysiology (4) GE (3-6)</p> <p style="text-align: right;">***Total (7-10)</p>	<p><i>Spring</i> RadSci XXXX–Management Strategies in Radiologic Sciences (2)</p> <p>Adv. Radiography Practicum Choose One (3): o RadSci 5089-CT Practicum o RadSci 5189-MRI Practicum o RadSci 5289 – Mammography o RadSci 5389 – Admin & QM o RadSci 5489 – Rad Sci Education o RadSci 5589-Vascular Intervention</p> <p style="text-align: right;">***Total (5)</p>
<p><i>Summer</i> Rad Sci 4530-Quality Mgmt. in Rad Sci.(3) Rad Sci 3200 (2) HTHRHC 5510- Pharmacology (2)</p> <p style="text-align: right;">***Total (7)</p>	<p>***Below full time</p>

**The program will give individual consideration in the admission assessment to courses taken and applicant experiences.*

ADDITIONAL INFORMATION

It is strongly recommended that prospective students schedule an appointment with a pre-HRS advisor. If you are not a pre-HRS student, you must complete an online major information session prior to meeting with a pre-HRS advisor. Further information can be accessed online under the admissions tab. Prospective students such as baccalaureate degree-holders, transfer, international, or those that have time commitment issues such as student athletes and band members are strongly encouraged to meet with a pre-HRS advisor to discuss special circumstances which may apply.

Student Services Office
School of Health and Rehabilitation Sciences

Randee L. Hunter, PhD
Assistant Professor-Clinical

206 Atwell Hall, 453 West 10th Ave.

Columbus, Ohio 43210

614-292-1706

HRSStudentservices@osumc.edu

Division of Radiologic Sciences and Therapy

243A Atwell Hall, 453 West 10th Ave.

Columbus, Ohio 43210

randee.hunter@osumc.edu

6/2018



The School of Health and Rehabilitation Sciences
Radiologic Sciences and Therapy

Online Bachelors of Science (BS) Degree Completion-
Administration/Management Track

The School of Health and Rehabilitation Sciences (SHRS) is a School in The Ohio State University College of Medicine. The School is nationally recognized as a leader in practice-based health care education. For more than five decades, the School has prepared students to achieve personal and professional excellence, as they pursue an exciting career in healthcare.

PROGRAM OVERVIEW

The AS to BS Online Degree Completion program is designed for individuals holding a certification in radiography, radiation therapy, nuclear medicine technology, or sonography from the American Registry of Radiologic Technologists (ARRT), the Nuclear Medicine Technology Certification Board (NMTCB), or the American Registry of Diagnostic Medical Sonography (ARDMS) who would like to continue their education to the baccalaureate level. The student will select a focused track of either administration/management or education.

ADMISSION & APPLICATION PROCEDURES

Applicants must meet the following minimum requirements and submit requested materials to be considered for admission. The application deadline for 2019 is January 31st, 2019. The professional program will begin August 2019.

- 1. An electronic application is available online at http://gpadmissions.osu.edu/prof/hrs.html which must be completed and submitted with all required supplemental documents, if applicable.
2. A minimum 2.50 cumulative GPA is required in all coursework taken at all accredited institutions. All post-secondary coursework is considered. Although a 2.5 GPA is the minimum, the average GPA is higher.
3. Completion of all prerequisite courses or their equivalents with a C- or higher by the end of spring semester.
4. Three letters of recommendation (one addressing your academic experience, one addressing your clinical experience, and one addressing your personal attributes) must be mailed to: SHRS Admission Office / 206 Atwell Hall / 453 W. 10th Ave. / Columbus, OH 43210.

DEGREE REQUIREMENTS

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GENERAL EDUCATION

SHRS students are encouraged to complete all General Education (GE) before applying to the AS to BS Online Degree Completion Program. Some of these requirements overlap with program prerequisites or professional curriculum courses. The required course work is listed below:

Table with 4 columns: Writing (6 hours), Math (4-5 hours), Art (3 hours), Historical Study or Culture & Ideas (3 hours); Data Analysis (3 hours), Literature (3 hours), Science (10 hours), Social Diversity in the US (0-3 hours); Social Science (6 hours), Global Studies (0-6 hours), Historical Study (3 hours), Open Options (6 hours)

PROGRAM PREREQUISITES (18 SEMESTER HOURS INCLUDING COURSES COUNTED AS GE HOURS GE)

Students who wish to apply to the AS to BS Online Degree Completion Program must have completed all of the following program prerequisite courses or their equivalent with a C- or higher by the end of spring semester, 2018. In addition to the courses below, applicants must have taken a college course in Chemistry and Biology.

Math 1148 GE EEOB 2520 GE Anatomy 2300.04 or 3300 GE

SUGGESTED SCHEDULING PLAN

The following plan demonstrates how students may complete the Radiologic Sciences & Therapy Online BS Degree Completion program in 5 terms. The timeline will vary depending on the amount of GEs the student needs to complete. It is assumed that students following this plan who are admitted to the program will begin professional coursework autumn term of their first year of enrollment at Ohio State.

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1. Apply to the University via the Admissions Office
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The course offerings are a tentative plan and subject to change.

YEAR 1	YEAR 2
<p><i>Autumn</i> STATS 1350 – Elementary Statistics (3)^{GE} GE (3-6)</p> <p style="text-align: right;">***Total (6-9)</p> <p>Suggested course: ECON 2001.01 – Principles of Microeconomics (3)^{GE}</p>	<p><i>Autumn</i> HTHRHSC 5900 – Health Sciences Research: Interpretation and Applications (3) HTHRHSC 5300 – Management Principles and Human Resources for Health Care Professionals (3) HTHRHSC 4193 - Ind. Study: Project proposal (1)</p> <p style="text-align: right;">***Total (7)</p>
<p><i>Spring</i> HTHRHSC 5500 – Introduction to Pathophysiology (4) GE (3-6)</p> <p style="text-align: right;">***Total (7-10)</p> <p>Suggested course: ACCTMIS 2000 – 0030 – Foundations of Accounting (3)</p>	<p><i>Spring</i> Rad Sci xxxx – Management Strategies in Radiologic Sciences (2) Rad Sci 5389 – Administration & Quality Management in the Radiologic Sciences (3) GE (3-6)</p> <p style="text-align: right;">***Total (5)</p>
<p><i>Summer</i> Rad Sci 4530 - Quality Management in the Radiologic Sciences (3) Rad Sci 3200 – Evidence Based Practice in the Radiologic Sciences (2) HTHRHSC 5510 – Pharmacology (2)</p> <p style="text-align: right;">***Total (7)</p>	<p><i>***Below full time</i></p>

ADDITIONAL INFORMATION

It is strongly recommended that prospective students schedule an appointment with an HRS Student Services advisor to evaluate transfer credit and General Education (GE) courses.

Office of Student Services
 School of Health and Rehabilitation Sciences
 206 Atwell Hall, 453 West 10th Ave.
 Columbus, Ohio 43210
 614-292-1706
HRSStudentServices@osumc.edu

Randee L. Hunter, PhD.
 Assistant Professor-Clinical
 Division of Radiologic Sciences and Therapy
 243A Atwell Hall, 453 West 10th Ave.
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randee.hunter@osumc.edu

9/2018

NEW COURSE REQUEST FORM

Submission Date : 19 September 2018

General Information

*EFFECTIVE TERM: SUI9 and AU19_

*Course Bulletin Listing/Subject Area: : *Radiologic Sciences & Therapy*Fiscal Unit/Academic Org **D2504 - SHRS***College/Academic Org List **Health and Rehabilitation Sci***Level/Career Undergraduate Graduate Professional*Course Number/Catalog: 3200 Honors Designation **E- Honors Embedded Course**

*Course Title: (Max 100 Characters) Evidence Based Medicine in Radiologic Sciences

*Transcript Abbreviation: (Max 18-Characters)(This is what will show up on the student's transcript for the course)
RadSci EBP

*Course Description: (Maximum 250 Characters for Course Bulletin) Introduction to radiologic sciences focusing on innovations impacting clinical practice. The scientific writing process is used to implement the process of analyzing and synthesizing credible evidence to advance clinical practice skills.

*Semester Credit Hours: Fixed -OR- Variable 2 # hours

Offering Information

*Length of Course 4 Week (May Session) 7 Week 14 Week 12 Week (May + Summer)*Flex Schedule Course **No***Does any section of this course have a distance education component? **Yes**

*If yes, is any section of the course offered... (Note: check all that apply)

 100% at a distance? Greater or equal to 50% at a distance? Less than 50% at a distance?

*Grading Basis (Select one)

 Letter Grade Satisfactory/Unsatisfactory Progress - S/U Progress - Letter*Repeatable **No***If Yes, state: *Maximum number of credit hours / units allowed *Maximum number of separate course completions allowed *Whether to allow multiple enrollments in a term **No**

***Course Component**

- Seminar
- Clinical
- Field Experience
- Independent Study
- Laboratory
- Lecture
- Workshop
- Recitation

***Graded Component**

- Seminar
- Clinical
- Field Experience
- Independent Study
- Laboratory
- Lecture
- Workshop
- Recitation

***Credit Available by Exam No**

*If yes, select exam type (Note: check all that apply)

- Advanced Placement Program (AP)
- College Level Examination Program (CLEP)
- Departmental Exam
- EM Tests via university Office of Testing
- International Baccalaureate

***Off Campus Always**

***Campus Offering** (Check all that Apply): Columbus LIMA other - which one(s)? _____

Prerequisites and Exclusions

***Prerequisites/Co-requisites** Max 500 Characters (Write out prerequisites here!) Acceptance in the Radiologic Sciences and Therapy Division

***Exclusions** Max 500 Characters (Write any exclusions here (quarter equivalencies, etc.)) N/A

Cross-Listings

***Cross-Listings** Max 250 Characters (Will your course be cross listed with any other course? If so, which one(s)?) N/A

Subject/CIP Code

***Subject/CIP Code** 34.01 (Note: search <<http://nces.ed.gov/ipeds/cipcode/>> for list of options)

***Subsidy Level** Baccalaureate ***Must match highest intended rank**

***Intended Rank (Check all that apply)**

- Freshman
- Sophomore
- Senior
- Junior
- Masters
- Professional
- Doctoral

***Requirement/Elective Designation** (Note: check all that apply)

- Required for this unit's degrees, majors, and/or minors
- General Education course ***If yes, for which topic(s) does this course meet the requirements** _____
- The course is an elective (for this or other units) or is a service course for other units

*COMMENTS: _____ (List course comments here, including term(s)/session(s) when course is offered)

Course Goals or Learning Objectives/Outcomes (knowledge, skills, and attitudes/perspectives)

1. Describe the variety of careers in radiologic sciences and therapy and the individual contributions to patient care.
2. Distinguish among the various innovative techniques and careers presented with reference to their unique role in the prevention, diagnosis, and/or treatment of disease.
3. Distinguish between various levels of written evidence that support clinical practice.
4. Demonstrate the ability to conduct a literature search identifying credible resources.
5. Synthesize information from sources in a clear, logical, and focused written format.
6. Communicate about an area of interest within radiologic sciences and therapy in scientific writing format, through the submission of reaction papers.

Content Topic List

*Choosing a Topic and Evidence-Based Medicine
Using Google Scholar, CINAHL, PubMed and Other Library Resources
Evidenced based practice in Ultrasound
Research in Imaging
Evidence based practice in Oncology Treatments
Imaging in Orthopedics
Mammography-Breast Imaging
Evidence based practice in MRI
Evidence based practice in Vascular Medicine
Evidence based practice in CT
Innovations in Pediatric Imaging
Evidence based practice in Interventional Radiology
Fusion Imaging
Where can high quality writing take you?*

Approval Signatures

Faculty Member Course Initiator:

Signature 	Date 9 September 2018
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Department/Division Director:

Signature	Date
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Curriculum Chair:

Signature	Date
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Graduate Studies Committee Chair:

Signature	Date
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Academic Unit Chair/School Director:

Signature	Date
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Honors (if appropriate)

Signature	Date
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THE OHIO STATE UNIVERSITY
School of Health & Rehabilitation Sciences
Radiologic Science & Therapy Division

COURSE NUMBER, TITLE, CREDIT: Radiologic Sciences and Therapy 3200, Evidence Based Medicine in Radiologic Sciences, U, 02 credit hours

SEMESTER: SU 19

PREREQUISITES: Acceptance in the Radiologic Sciences and Therapy Division

MEETING TIME AND PLACE: Online

FACULTY:

Randee L. Hunter, PhD
340B Atwell Hall
Office Hours: by email or appointment
Randee.Hunter@osumc.edu

COURSE DESCRIPTION:

This course provides an orientation to radiologic sciences and therapy careers by describing roles and responsibilities available within the field with a focus on a review of timely issues and innovations impacting clinical practice. Information related to the scientific writing process is used to implement the process of analyzing and synthesizing credible evidence to advance clinical practice skills.

COURSE OBJECTIVES:

Upon completion of the course, the student will be able to:

1. Describe the variety of careers in radiologic sciences and therapy and the individual contributions to patient care.
2. Distinguish among the various innovative techniques and careers presented with reference to their unique role in the prevention, diagnosis, and/or treatment of disease.
3. Distinguish between various levels of written evidence that support clinical practice.
4. Demonstrate the ability to conduct a literature search identifying credible resources.
5. Synthesize information from sources in a clear, logical, and focused written format.
6. Communicate about an area of interest within radiologic sciences and therapy in scientific writing format, through the submission of reaction papers.

COURSE MATERIALS AND TECHNOLOGIES

Course technology:

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours> and support for urgent issues is available 24X7.

- Self-service and chat support: <http://ocio.osu.edu/selfservice>
- Phone: 614-688-4357
- Email: 8help@osu.edu
- TDD: 614-688-8743

Baseline Technical Skills for Online Courses

- Basic computer and web-browsing skills
- Navigating Carmen

EVALUATION:

Final grades will be based on:

Participation (Carmen discussion posts)	100 points
Quizzes	50 points
Peer Review	50 points (25 points X 2 papers)
<u>Scientific Reaction Papers</u>	<u>100 points (50 points X 2 papers)</u>
Total	300 points

GRADE ITEM DESCRIPTION

1. **Discussion participation-** Students will be expected to respond to a guided **discussion THREE times weekly**. Discussion prompts will be posted on Monday by 5pm. Students may either post directly to the prompt, respond to a fellow student's post in a respectful manner, or post a new prompt/question for others to answer. To receive full credit for the post, it must be completed on time (prior to 11:59pm on Friday of the same week); demonstrate critical thinking and knowledge of the week's topic; be respectful; pertain to the topic of the week or integrate information from previous topics or discussions.

Guidelines: The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful

- **Writing style-** while there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using correct grammar, spelling, and punctuation.
 - **Tone and civility-** Let's maintain a supportive learning community where everyone feels safe and people can disagree amicably. Remember that sarcasm does not always translate and can be offensive.
 - **Citing your sources-** When we have academic discussions, please cite your sources to back up what you say. For textbook or other course materials, list title and page numbers. For online sources, include the link)
2. **Quizzes-** Quizzes will be proctored online covering material presented in the course. Quizzes will be timed according to number of questions and content difficulty. Late quizzes will not be accepted. If a quiz is missed due to illness or emergency, you must contact Dr. Hunter within 24 hours of the due date and reschedule the online offering for within 7 days.
 3. **Peer Review-** Each student will be randomly assigned a classmate's rough draft of each (2) paper to peer review. The peer reviewer should provide the student with feedback concerning: grammar, syntax, organization, conceptual clarification, etc. Each peer reviewer must communicate, in a respectful manner, any advice they may have for the student to improve upon their existing paper.
 4. **Scientific Reaction Papers-** The student is expected to complete and submit **2 scientific reaction papers** during the course. The topic chosen should be applicable to a **radiologic science topic presented in the course** and reference should be drawn to **two professional peer-reviewed journal articles** concerning said topic. Each paper should summarize the two resources and offer the student's critical analysis of the science behind the studies as well as implications for clinical practices. Papers will be graded according to the provided grading rubric. All papers **must be** word processed, double spaced, on white 8 1/2" x 11" paper with minimum 10pt and maximum 12pt font, and maximum 1" margins. The paper **must fill at least 3 pages**, but may not exceed 5 pages. Late papers will not be accepted.

Honor Embedded Course Guidelines

The Honors section of this course is provided to allow those students to participate at a higher level of expectation and experience adding to their individual course of study.

Rad Sci HE 200 will require the same attendance for weekly presentations; however, each honors student will need to discuss with the instructor of this course to work on a **research paper contract**. The research paper will be completed **in addition** to the required scientific reaction papers that are a course requirement for all Rad Sci 3200 students. The research paper will be developed with the instructor's guidance and will involve the review of evidence based practice related to a specific diagnostic/therapeutic innovation.

The Rad Sci HE 3200 student will review the literature relative to the specific diagnostic/therapeutic modality and with the instructors' guidance will **write a literature review** based on the levels of evidence for a particular disease process and its diagnostic or therapeutic interventions. The grading of the literature review will follow the rubric that is provided for all required writing submissions.

EVALUATION FOR HONORS EMBEDDED:

Participation	=100 points
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Quizzes	=50 points
Peer Review	=50 points (25 points X 2 papers)
Two Scientific Reaction Papers	=100 points (50 points X 2 papers)
<u>Literature Review</u>	=100 points
Total	=400 points

GRADE SCHEME:

93–100: A
 90–92.9: A-
 87–89.9: B+
 83–86.9: B
 80–82.9: B-
 77–79.9: C+
 73–76.9: C
 70–72.9: C-
 67–69.9: D+
 60–66.9: D
 Below 60: E

FACULTY FEEDBACK AND RESPONSE TIME

I am providing the following list to give you an idea of my intended availability throughout the course (Remember you can call 614-688-4357 at any time if you have a technical problem)

- Grading and feedback: For large weekly assignments, you can generally expect feedback within 7 days
- E-mail: I will reply to proper e-mails within 24 hours on school days
- Discussion board: I will check and reply to messages in the discussion boards every 24 hours on school days

RadSci 3200 Evidence Based Practice in Radiologic Sciences

Course Schedule: *(Subject to change)*

<u>DATE</u>	<u>TOPIC</u>	<u>LECTURER</u>
8/27	Syllabus Review and Course Requirements <i>Choosing a Topic and Evidence-Based Medicine</i>	<i>Dr. Hunter</i>
9/3	Labor Day No class!	
9/10	<i>Using Google Scholar, CINAHL, PubMed and Other Library Resources</i>	<i>Anna Biszaha –Prior HSL</i>
9/17	<i>Evidenced based practice in Ultrasound</i>	<i>Nicole Stigall</i>
9/24	<i>Research in Imaging</i>	<i>Karen Briley, PhD</i>
10/1	<i>Evidence based practice in Oncology Treatments</i>	<i>Todd Hattie</i>
10/08	<i>Imaging in Orthopedics</i>	<i>Rachel Tatarski</i>
10/15	<i>Mammography-Breast Imaging</i>	<i>Angie Butwin, MS, RDMS</i>
10/22	<i>Evidence based practice in MRI</i>	<i>Ty Fout, MS, RT,(R)(MR)</i>

10/29	<i>Evidence based practice in Vascular Medicine</i>	<i>Nicole Stigall</i>
11/5	<i>Evidence based practice in CT</i>	<i>Will Pickeral, BSRT(R)(CT)</i>
11/12	<i>Innovations in Pediatric Imaging</i>	<i>Allison Stokes, BSRT(R)</i>
11/19	<i>Evidence based practice in Interventional Radiology</i>	<i>Austin Brady</i>
11/26	<i>Fusion Imaging</i>	<i>Dr. Hunter</i>
12/3	* Student Survey demonstrated/Electronic SEI <i>Where can high quality writing take you?-</i>	<i>Dr. Hunter</i>

MUTUAL EXPECTATIONS

In order to establish a climate for learning, students and the instructor must enter into a relationship of mutual respect and trust. When such an environment exists, knowledge can be shared, creativity encouraged, and collegiality fostered. Both the instructor and students have a set of expectations which, if met, will help develop such an environment. Students should be able to expect that the instructor will be knowledgeable, prepared, enthusiastic, respectful, responsive, flexible, reasonably available, sensitive, fair, and ethical. Student should participate actively in the learning process, seek knowledge, communicate effectively, value diversity, and observe the university rules for student conduct.

ACADEMIC MISCONDUCT

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

- The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination.
- Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct. If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.
- If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.
- Other sources of information on academic misconduct (integrity) to which you can refer include:
 - The Committee on Academic Misconduct web pages
 - <http://www.oaa.osu.edu/coam/home.html>

STUDENTS WITH SPECIAL NEEDS

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THE OHIO STATE UNIVERSITY
School of Health & Rehabilitation Sciences
Radiologic Science & Therapy Division

COURSE NUMBER, TITLE, CREDIT: Radiologic Sciences and Therapy 3200, Evidence Based Medicine in Radiologic Sciences, U, 02 credit hours

SEMESTER: Autumn '18

PREREQUISITES: Declared major in the Radiologic Sciences

MEETING TIME AND PLACE:

Monday 5:10-7PM Atwell Hall Room 327

FACULTY:

Randee L. Hunter, PhD
243A Atwell Hall
Office Hours: by appointment
Randee.Hunter@osumc.edu

COURSE DESCRIPTION:

This course provides an orientation to radiologic sciences and therapy careers by describing roles and responsibilities available within the field with a focus on a review of timely issues and innovations impacting clinical practice. Information related to the scientific writing process is used to implement the process of analyzing and synthesizing credible evidence to advance clinical practice skills.

COURSE OBJECTIVES:

Upon completion of the course, the student will be able to:

1. Describe the variety of careers in radiologic sciences and therapy and the individual contributions to patient care.
2. Distinguish among the various innovative techniques and careers presented with reference to their unique role in the prevention, diagnosis, and/or treatment of disease.
3. Distinguish between various levels of written evidence that support clinical practice.
4. Demonstrate the ability to conduct a literature search identifying credible resources.
5. Synthesize information from sources in a clear, logical, and focused written format.
6. Communicate about an area of interest within radiologic sciences and therapy in scientific writing format, through the submission of reaction papers.

EVALUATION:

Final grades will be based on:

Attendance	= 100 points (10 points deducted for each class missed)
Quizzes	= 50 points (10 quizzes times 5 points/test)
Two peer reviews	= 100 points (50 points each)
<u>Two Written assignments</u>	<u>= 200 points (100 points each)</u>
Total	450 points

1. **Peer Review-** Each student will be randomly assigned a classmate's rough draft of each (2) paper to peer review. The peer reviewer should provide the student with feedback concerning: grammar, syntax, organization, conceptual clarification, etc. Each peer reviewer must communicate, in a respectful manner, any advice they may have for the student to improve upon their existing paper.
2. **Scientific Reaction Papers-** The student is expected to complete and submit **2 scientific reaction papers** during the course. The topic chosen should be applicable to **a radiologic science topic presented in the course** and reference should be drawn to **two professional peer-reviewed journal articles** concerning said topic. Each paper should summarize the two resources and offer the student's critical analysis of the science behind the studies as well as implications for clinical practices. Papers will be graded according to the provided grading rubric. All papers **must be** word processed, double spaced, on white 8 1/2"

x 11" paper with minimum 10pt and maximum 12pt font, and maximum 1" margins. The paper must fill at least 3 pages, but may not exceed 5 pages. Late papers will not be accepted.

Honor Embedded Course Guidelines

The Honors section of this course is provided to allow those students to participate at a higher level of expectation and experience adding to their individual course of study.

Rad Sci HE 200 will require the same attendance for weekly presentations; however, each honors student will need to meet with the instructor of this course to work on a **research paper contract**. The research paper will be completed **in addition** to the required reaction papers that are a course requirement for Rad Sci 3200 students. The research paper will be developed with the instructor's guidance and will involve the review of evidence based practice related to a specific diagnostic/therapeutic innovation.

The Rad Sci HE 3200 student will review the literature relative to the specific diagnostic/therapeutic modality and with the instructors' guidance will **write a literature review** based on the levels of evidence for a particular disease process. The grading of the literature review will follow the rubric that is included for all required writing submissions

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RadSci 3200 Evidence Based Practice in Radiologic Sciences

Course Schedule: *(Subject to change)*

DATE	TOPIC	LECTURER
8/27	Syllabus Review and Course Requirements <i>Choosing a Topic and Evidence-Based Medicine</i>	<i>Dr. Hunter</i>
9/3	Labor Day No class!	
9/10	<i>Using Google Scholar, CINAHL, PubMed and Other Library Resources</i>	<i>Anna Biszaha –Prior HSL</i>
9/17	<i>Evidenced based practice in Ultrasound</i>	<i>Nicole Stigall</i>
9/24	<i>Research in Imaging</i>	<i>Karen Briley, PhD</i>
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12/3	* Student Survey demonstrated/Electronic SEI <i>Where can high quality writing take you?-</i>	<i>Dr. Hunter</i>

NEW COURSE REQUEST FORM

Submission Date : 19 September 2018

General Information

*EFFECTIVE TERM: SU19

*Course Bulletin Listing/Subject Area: : *Radiologic Sciences & Therapy*

Fiscal Unit/Academic Org **D2504 - SHRS**

*College/Academic Org List **Health and Rehabilitation Sci**

*Level/Career Undergraduate Graduate Professional

*Course Number/Catalog: 4530 Honors Designation **Select.**

*Course Title: (Max 100 Characters) Quality Management in Radiologic Sciences

*Transcript Abbreviation: RadSci QM (Max 18-Characters)(This is what will show up on the student's transcript for the course)

RadSci QM

*Course Description: (Maximum 250 Characters for Course Bulletin) Investigation of quality management principles and techniques specific to the imaging sciences including modality specific lab accreditation and national requirements.

*Semester Credit Hours: Fixed -OR- Variable 3 # hours

Offering Information

*Length of Course 4 Week (May Session) 7 Week 14 Week 12 Week (May + Summer)

*Flex Schedule Course **No**

*Does any section of this course have a distance education component? **Yes**

*If yes, is any section of the course offered... (Note: check all that apply)

100% at a distance?

Greater or equal to 50% at a distance?

Less than 50% at a distance?

*Grading Basis (Select one)

Letter Grade

Satisfactory/Unsatisfactory

Progress - S/U

Progress - Letter

*Repeatable **No**

*If Yes, state: _____

*Maximum number of credit hours / units allowed _____

*Maximum number of separate course completions allowed _____

*Whether to allow multiple enrollments in a term **No**

***Course Component**

Seminar
 Clinical
 Field Experience
 Independent Study
 Laboratory
 Lecture
 Workshop
 Recitation

***Graded Component**

Seminar
 Clinical
 Field Experience
 Independent Study
 Laboratory
 Lecture
 Workshop
 Recitation

***Credit Available by Exam No**

*If yes, select exam type (Note: check all that apply)

Advanced Placement Program (AP)
 College Level Examination Program (CLEP)
 Departmental Exam
 EM Tests via university Office of Testing
 International Baccalaureate

***Off Campus Always**

***Campus Offering** (Check all that Apply): Columbus LIMA other - which one(s)? _____

Prerequisites and Exclusions

***Prerequisites/Co-requisites** Max 500 Characters (Write out prerequisites here!) Enrollment in RadSci, or permission of instructor.

***Exclusions** Max 500 Characters (Write any exclusions here (quarter equivalencies, etc.)) N/A

Cross-Listings

***Cross-Listings** Max 250 Characters (Will your course be cross listed with any other course? If so, which one(s)?) N/A

Subject/CIP Code

***Subject/CIP Code** 34.01 (Note: search <<http://nces.ed.gov/ipeds/cipcode/>> for list of options)

***Subsidy Level** Baccalaureate ***Must match highest intended rank**

***Intended Rank (Check all that apply)**

Freshman Sophomore Senior Junior Masters Professional Doctoral

***Requirement/Elective Designation** (Note: check all that apply)

Required for this unit's degrees, majors, and/or minors
 General Education course ***If yes, for which topic(s) does this course meet the requirements** _____
 The course is an elective (for this or other units) or is a service course for other units

*COMMENTS: _____ (List course comments here, including term(s)/session(s) when course is offered)

Course Goals or Learning Objectives/Outcomes (knowledge, skills, and attitudes/perspectives)

1. Identify in verbal and written communication, the need for quality management in the radiologic sciences and identify the four main components of a QM program.
2. Differentiate between a quality management program and quality control testing.
3. Utilize the various tools for group dynamics.
4. Perform statistical analysis and create graphs and charts used to organize and present QM data.
5. Specify the components of a risk management program.
6. Identify federal, state, and professional agencies and groups involved with quality improvement aspects of medical imaging and therapy.
7. Summarize the events leading to the federal recommendations which pertain to radiologic sciences quality management programs.
8. Summarize the elements essential for the success of a radiographic quality management program as required by TJC and ODH.
9. Design a lab accreditation submission that is based on established techniques and procedures fundamental to the planning, implementation, maintenance and evaluation of such a program, demonstrating proper analysis techniques.
10. Discuss the concepts of digital and electronic radiology quality management to include security, imaging, and archival systems.
11. Discuss what is meant by visual quality control equipment checks, its importance and examples of items that should be included in such checks.
12. Identify the appropriate test tools to be used, describe and perform modality specific quality control tests.
13. List the parameters that should be considered for quality control monitoring, analyze test results, and indicate necessary corrective action, if required.

Content Topic List

	Date	Topic	Reading Assignment
	Week 1	Discuss Course Syllabus; Overview of Quality Management principles	Hunter Discussion #1
	Week 2	Total Quality Management Plans	Hunter Discussion #2

Week 3	Regulatory/Accreditation Organizations Inspection Readiness: ODH, TJC, etc Quiz #1	Seth Sivard Discussion #3
Week 4	Introduction to International Accreditation Committee	Web video assignment Discussion #4
Week 5	Information Data Security	Lori Oberholzer, JD, RT and Brian Mitchell Discussion #5
Week 6	Ethics in Radiologic Sciences	Hunter Discussion #6
Week 7	TeamSTEPPS Quiz #2	Hunter Discussion #7
Week 8	Zap It! Quality Control	Bryon Murray Discussion #8
Week 9	Risk Management	OSUMC Legal Discussion #9
week 10	Review IAC equipment requirements	Teams
Week 11	Discuss preparing IAC submissions	Teams
Week 12	Submit mock IAC accreditation	Teams Final Discussion #10

Approval Signatures

Faculty Member Course Initiator:

Signature 	Date 19 September 2018
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Department/Division Director:

Signature	Date
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Curriculum Chair:

Signature	Date
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Graduate Studies Committee Chair:

Signature	Date
Academic Unit Chair/School Director:	
Signature	Date
Honors (if appropriate)	
Signature	Date

THE OHIO STATE UNIVERSITY
School of Health & Rehabilitation Sciences
Radiologic Science & Therapy Division

COURSE NUMBER, TITLE, CREDIT: Rad Sci 4530, Quality Management in the Radiologic Sciences, U, 03 Credit Hours

SEMESTER OFFERED: SU 2019

PREREQUISITES: Rad Sci 3425

MEETING PLACE AND TIME:

Lecture: Online

INSTRUCTORS:

Randee Hunter, PhD
Email: Randee.Hunter@osumc.edu
Office Hours: By email or appointment only

TEXT:

Papp, J: *Quality Management in the Imaging Sciences*, ed. 4, St. Louis, Mosby, 2011. **Selected readings posted on Carmen**

Suggested References:

Ohio Administrative Code: X-ray Equipment Registration & Inspection available at
<http://www.odh.ohio.gov/odhPrograms/rp/xequip/xequip1.aspx>

COURSE DESCRIPTION: Investigation of quality management principles and techniques specific to the imaging sciences including modality specific lab accreditation and national requirements.

COURSE GOALS:

In order to satisfactorily complete this course in quality management within the radiologic sciences, the student is expected to demonstrate completion of the following:

1. Demonstrate knowledge and comprehension of course content by meeting course objectives.
2. Demonstrate ability to apply knowledge of content by:
 - a. finding, gathering, analyzing, documenting and presenting data relevant to course assignments.
 - b. actively participating in projects and successfully completing assigned projects.
3. Demonstrate ability to analyze, synthesize and evaluate data to include the ability to:
 - a. review and evaluate this course in terms of personal/professional relevance.
 - b. combine, organize, compare and contrast readings and content.
 - c. plan and organize experiences relevant to projects and analyze and evaluate data obtained from such activities.
4. Respond to class lectures and assignments and to:
 - a. participate, when appropriate, in online discussion and exercises, in consultation with peers and instructors.
 - b. Arrange online consultation conferences with instructor and/or peers when needed.
5. Recognize and act on personal values, life and learning style by selecting, organizing and completing personal choice of additional assignments for this course.
6. Demonstrate knowledge and psychomotor skills necessary for submitting legible, appropriately constructed project reports, term papers, outlines, and charts by:
 - a. word processing.
 - b. constructing and presenting material so that it can be read and that the placement of data is logical.
 - c. using appropriate vocabulary, spelling, and grammar in all written activities.

COURSE OBJECTIVES: Upon completion of the course the learner should be able to:

1. Identify in verbal and written communication, the need for quality management in the radiologic sciences and identify the four main components of a QM program.

2. Differentiate between a quality management program and quality control testing.
3. Utilize the various tools for group dynamics.
4. Perform statistical analysis and create graphs and charts used to organize and present QM data.
5. Specify the components of a risk management program.
6. Identify federal, state, and professional agencies and groups involved with quality improvement aspects of medical imaging and therapy.
7. Summarize the events leading to the federal recommendations which pertain to radiologic sciences quality management programs.
8. Summarize the elements essential for the success of a radiographic quality management program as required by TJC and ODH.
9. Design a lab accreditation submission that is based on established techniques and procedures fundamental to the planning, implementation, maintenance and evaluation of such a program, demonstrating proper analysis techniques.
10. Discuss the concepts of digital and electronic radiology quality management to include security, imaging, and archival systems.
11. Discuss what is meant by visual quality control equipment checks, its importance and examples of items that should be included in such checks.
12. Identify the appropriate test tools to be used, describe and perform modality specific quality control tests.
13. List the parameters that should be considered for quality control monitoring, analyze test results, and indicate necessary corrective action, if required.

COURSE REQUIREMENTS:

1. Learners will be held responsible for all material included on the required readings, handout materials, laboratory experiences and lectures.
2. Class participation requires the learner should be prepared and willing to discuss and respond to questions/discussion relative to scheduled lecture topics and assigned readings through Carmen discussion posts
3. The learner is expected to submit an end-of-course evaluation. The learner will review, analyze and synthesize the usefulness of this course for his/her personal and professional development by critiquing course objectives and content, texts and readings, instructional methods, instructional aids and guest speakers.
4. Participate in assigned project activities and complete reports based on the activities.
5. Projects will be assigned and are designed to complement lecture content and afford the learner the opportunity to apply the theoretical principles introduced. The learners will be assigned to small groups for individualize sessions that deal with discipline specific material.

COURSE MATERIALS AND TECHNOLOGIES

Course technology:

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours> and support for urgent issues is available 24X7.

- Self-service and chat support: <http://ocio.osu.edu/selfservice>
- Phone: 614-688-4357
- Email: 8help@osu.edu

- TDD: 614-688-8743

Baseline Technical Skills for Online Courses

- Basic computer and web-browsing skills
- Navigating Carmen

COURSE GRADE

Quiz #1	25 points
Quiz #2	25 points
Discussion participation	100 points
IAC Group Mock Submission	100 pts
Total Quality Management Project	100 pts

GRADE SCHEME

93–100: A
 90–92.9: A-
 87–89.9: B+
 83–86.9: B
 80–82.9: B-
 77–79.9: C+
 73–76.9: C
 70–72.9: C-
 67–69.9: D+
 60–66.9: D
 Below 60: E

GRADE ITEM DESCRIPTION

1. **Quizzes-** Two quizzes will be proctored online covering material presented in the course. Quizzes will be timed according to number of questions and content difficulty. Late quizzes will not be accepted. If a quizzed is missed due to illness or emergency, you must contact Dr. Hunter within 24 hours of the due date and reschedule the online offering for within 7 days.
2. **Discussion participation-** Students will be expected to respond to a guided discussion THREE times weekly. Discussion prompts will be posted on Monday by 5pm. Students may either post directly to the prompt, respond to a fellow student’s post in a respectful manner, or post a new prompt/question for others to answer. To receive full credit for the post, it must be completed on time (prior to 11:59pm on Friday of the same week); demonstrate critical thinking and knowledge of the week’s topic; be respectful; pertain to the topic of the week or integrate information from previous topics or discussions.

Guidelines: The following are my expectations for how we should communicate as a class. Above all, please remember to respectful and thoughtful

- **Writing style-** while there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using correct grammar, spelling, and punctuation.
 - **Tone and civility-** Let’s maintain a supportive learning community where everyone feels safe and people can disagree amicably. Remember that sarcasm does not always translate and can be offensive.
 - **Citing your sources-** When we have academic discussions, please cite your sources to back up what you say. For textbook or other course materials, list title and page numbers. For online sources, include the link)
3. **IAC Group Mock Submission-** In your **specialty** group (i.e. CT, MR, interventional, sonography, etc), you will be writing and submitting an IAC Accreditation for a fictional facility which you run. Using the guidelines you can download for each specialty from the IAC website, you will alter the requirements **under sections A and B** as if you were submitting to the IAC for accreditation. The already written guidelines from the IAC will serve as your **template (or minimum standards)**. Your responsibility as a group is to use the material and guest lectures we have had throughout this course to add and/or alter these standards as you see fit. Remember, you cannot lessen the standards set by the IAC, but you can increase them as well as add standards to fit the goals of your fictional facility.

4. **Total Quality Management Project**- As Manager of your fictional facility seeking IAC accreditation, you must provide documentation of your Total Quality Management/Quality Improvement plan to the site visitors. Thus, choose ONE aspect of a TQM/Quality Improvement initiative (you can use the lecture topics and/or scenarios you have heard about throughout the course, or an issue you have identified in clinicals, to guide you to an aspect of your department on which you may need to implement a quality improvement initiative) and provide a detailed plan. You should use the Deming's Cycle of Improvement to approach this issue and organize your TQM plan.
- Outline the issue you have chosen in detail. Provide some (fabricated) data to justify your decision that this is an area that needs improvement.
 - Describe, in detail, your plan for improvement:
 - o Who are the key players? What are their roles?
 - o Utilize some elements from the QM tools lecture to assist in your description of your plan)
 - o What is it that you are measuring? What benchmarks have you set based on where you started?
 - o How are you going to collect the data that you need to assess the effectiveness of the changes?
 - o How long will this trial last?
 - o How will this affect your department's ability to function within the whole of the hospital/facility?
 - Provide examples of the data that have been collected throughout the QM initiative (*be creative; you'll need to fabricate these data as **this is a fictional exercise**. However, use your experiences to gauge what **is reasonable** in terms of data)*
 - o Display and interpret these data (using, though not limited to, some of the ways we discussed in QM tools lecture).
 - o Did you meet your benchmarks? Surpass them? Fall short?
 - o Report any unexpected issues that arose and how you addressed them as the QM initiative went on...
 - Finally, discuss (and justify) your decision to implement or not based on the above facts from your QM initiative.

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The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue

ACADEMIC MISCONDUCT

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

- The Ohio State University’s Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the University, or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination.
- Ignorance of the University’s Code of Student Conduct is never considered an “excuse” for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct. If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University’s Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.
- If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.
- Other sources of information on academic misconduct (integrity) to which you can refer include:
 - The Committee on Academic Misconduct web pages
 - <http://www.oaa.osu.edu/coam/home.html>

MUTUAL EXPECTATIONS

In order to establish a climate for learning, students and the instructor must enter into a relationship of mutual respect and trust. When such an environment exists, knowledge can be shared, creativity encouraged, and collegiality fostered. Both the instructor and students have a set of expectations which, if met, will help develop such an environment. Students should be able to expect that the instructor will be knowledgeable, prepared, enthusiastic, respectful, responsive, flexible, reasonably available, sensitive, fair, and ethical. Student should participate actively in the learning process, seek knowledge, communicate effectively, value diversity, and observe the university rules for student conduct.

COURSE SCHEDULE

Date	Topic	Reading Assignment
Week 1	Discuss Course Syllabus; Overview of Quality Management principles	Hunter Discussion #1
Week 2	Total Quality Management Plans	Hunter Discussion #2
Week 3	Regulatory/Accreditation Organizations Inspection Readiness: ODH, TJC, etc Quiz #1	Seth Sivard Discussion #3
Week 4	Introduction to International Accreditation Committee	Web video assignment Discussion #4
Week 5	Information Data Security	Lori Oberholzer, JD, RT and Brian Mitchell Discussion #5
Week 6	Ethics in Radiologic Sciences	Hunter Discussion #6
Week 7	TeamSTEPPS Quiz #2	Hunter Discussion #7
Week 8	Zap It! Quality Control	Bryon Murray Discussion #8
Week 9	Risk Management	OSUMC Legal Discussion #9
week 10	Review IAC equipment requirements	Teams
Week 11	Discuss preparing IAC submissions	Teams
Week 12	Submit mock IAC accreditation	Teams Final Discussion #10

THE OHIO STATE UNIVERSITY
School of Health & Rehabilitation Sciences
Radiologic Science & Therapy Division

COURSE NUMBER, TITLE, CREDIT: Rad Sci 4530, Quality Management in the Radiologic Sciences, U, 03 Credit Hours

SEMESTER OFFERED: SU 2018

PREREQUISITES: Rad Sci 3425

MEETING PLACE AND TIME:

Lecture: Atwell Hall 327 F – 1:00-2:15pm

INSTRUCTORS: Randee Hunter, PhD
Email: Randee.Hunter@osumc.edu
Office Hours: By appointment only

TEXT: Scholtes, PR: *The Team Handbook*. Madison, WI: Joiner Publications. 1992, Chapters 1 & 2
(posted on Carmen)

Suggested References: Papp, J: *Quality Management in the Imaging Sciences*, ed. 4, St. Louis, Mosby, 2011.
Ohio Administrative Code: X-ray Equipment Registration & Inspection available at
<http://www.odh.ohio.gov/odhPrograms/rp/xequip/xequip1.aspx>

COURSE DESCRIPTION: Investigation of quality management principles and techniques specific to the imaging sciences including modality specific lab accreditation and national requirements.

COURSE GOALS:

In order to satisfactorily complete this course in quality management within the radiologic sciences, the student is expected to demonstrate completion of the following:

1. Demonstrate knowledge and comprehension of course content by meeting course objectives.
2. Demonstrate ability to apply knowledge of content by:
 - a. finding, gathering, analyzing, documenting and presenting data relevant to course assignments.
 - b. actively participating in projects and successfully completing assigned projects.
3. Demonstrate ability to analyze, synthesize and evaluate data to include the ability to:
 - a. review and evaluate this course in terms of personal/professional relevance.
 - b. combine, organize, compare and contrast readings and content.
 - c. plan and organize experiences relevant to projects and analyze and evaluate data obtained from such activities.
4. Attend and respond to class lectures and assignments and to:
 - a. participate, when appropriate, in classroom discussion and exercises, in consultation with peers and instructors.
 - b. arrange consultation conferences with instructor and/or peers when needed.
5. Recognize and act on personal values, life and learning style by selecting, organizing and completing personal choice of additional assignments for this course.
6. Demonstrate knowledge and psychomotor skills necessary for submitting legible, appropriately constructed project reports, term papers, outlines, and charts by:
 - a. word processing.
 - b. constructing and presenting material so that it can be read and that the placement of data is logical.
 - c. using appropriate vocabulary, spelling and grammar in all written activities.

COURSE OBJECTIVES: Upon completion of the course the learner should be able to:

1. Identify in verbal and written communication, the need for quality management in the radiologic sciences and identify the four main components of a QM program.
2. Differentiate between a quality management program and quality control testing.
3. Utilize the various tools for group dynamics.
4. Perform statistical analysis and create graphs and charts used to organize and present QM data.
5. Specify the components of a risk management program.
6. Identify federal, state, and professional agencies and groups involved with quality improvement aspects of medical imaging and therapy.
7. Summarize the events leading to the federal recommendations which pertain to radiologic sciences quality management programs.
8. Summarize the elements essential for the success of a radiographic quality management program as required by JCAHO and ODH.
9. Design a lab accreditation submission that is based on established techniques and procedures fundamental to the planning, implementation, maintenance and evaluation of such a program, demonstrating proper analysis techniques.
10. Discuss the concepts of digital and electronic radiology quality management to include security, imaging, and archival systems.
11. Discuss what is meant by visual quality control equipment checks, its importance and examples of items that should be included in such checks.
12. Identify the appropriate test tools to be used, describe and perform modality specific quality control tests.
13. List the parameters that should be considered for quality control monitoring, analyze test results, and indicate necessary corrective action, if required.

COURSE REQUIREMENTS:

1. Learners will be held responsible for all material included on the required readings, handout materials, laboratory experiences and lectures.
2. Class participation requires the learner should be prepared and willing to discuss and/or respond to questions/discussion relative to scheduled lecture topics and assigned readings. Attendance to class meetings is expected.
3. The learner is expected to submit an end-of-course evaluation. The learner will review, analyze and synthesize the usefulness of this course for his/her personal and professional development by critiquing course objectives and content, texts and readings, instructional methods, instructional aids and guest speakers.
4. Participate in assigned project activities and complete reports based on the activities.
5. During each break-out session, the learner is expected to actively participate by gathering, analyzing and evaluating data. Projects will be assigned and are designed to complement lecture content and afford the learner the opportunity to apply the theoretical principles introduced. The learners will be assigned to small groups for individualize sessions that deal with discipline specific material.

COURSE GRADE

Quiz #1	25 points
Quiz #2	25 points
Attendance	25 points

Assignments	TBD
IAC Submission	100 pts

STUDENTS WITH SPECIAL NEEDS

Students who feel they need an accommodation based on the impact of a disability should contact me to arrange an appointment as soon as possible (preferably the first week of the quarter). At the appointment, we can discuss the course format, anticipate your needs and explore potential accommodations. I rely on the Office of Disability Services for assistance in verifying the need for accommodation and developing accommodation strategies. If you have not previously contacted the Office of Disability Services, I encourage you to do so at: (614) 292-3307 or (614) 292-0901 (TDD).

ACADEMIC MISCONDUCT

Academic misconduct is defined as any activity that compromises the academic integrity of The Ohio State University or subverts the educational process. Academic misconduct of any nature will not be tolerated and will be dealt with in accordance with The Ohio State University Committee on Academic Misconduct Procedures and Rules.

TENATIVE COURSE SCHEDULE: LIKELY TO CHANGE BASED ON GUEST SPEAKER AVAILABILITY

Date	Topic	Reading Assignment
F. 5/11	Discuss Course Syllabus; Overview of Quality Management principles	Hunter– Team Handbook, Chapter 1
F. 5/18	Regulatory/Accreditation Organizations	Hunter-Team Handbook, Chapter 2
F. 5/25	Inspection Readiness: ODH, JCAHO, etc Quiz #1	Speaker: Seth Sivard
F. 6/01	Introduction to IAC	Web video assignment
F. 6/08	Information Data Security	Speaker: Speaker: Lori Oberholzer, JD, RT and Brian Mitchell
F. 6/15	Ethics in Radiologic Sciences	Speaker: Hunter
IV. F. 6/22	TeamSTEPPS Quiz #2	Speaker: Hunter
F 6/29	Zap It! Quality Control	Bryon Murray
V. F. 7/06	Risk Management	John Plant
F. 7/13	Review IAC equipment requirements	Teams
VI. F. 7/20	Discuss preparing IAC submissions	Teams
F. 7/27	Submit mock IAC accreditation	Teams

MEMORANDUM OF UNDERSTANDING

College:	College of Medicine
Department:	School of Health and Rehabilitative Sciences – Radiological Sciences
Faculty director:	Randee Hunter, PhD
Primary contact, if different from faculty director:	NA
Fiscal officer:	Alice Shi
Marketing director:	Lynn Howell
Enrollment contact for state authorization compliance:	Marcia Nahikian-Nelms, PhD,RDN,LD,FAND
Additional colleges/contacts:	Kevin Evans, RT(R) (M) (BD), RDMS, RVS, FSDMS, FAIUM

Name of program:	B.S. Degree Completion Radiologic Sciences
Approval process (change in delivery or new program):	Change to online delivery
Will this program have a different fee structure from what would normally be assessed similar students at the university? If so, then please explain:	no
Total credit hours:	23
# of courses to be created:	4
# of courses already in an online format that need ODEE review:	5
# of anticipated students:	50 (by year 5)

Marketing and Communications:	Having access to marketing resources will allow you to reach large audiences, compete with other online programs, and increase enrollments year-over-year. For this program, does your college plan to do any of the following? Yes/No	
	<i>Conduct advertising specific to this online program</i>	Yes
	<i>Utilize your college communications team for advertising support</i>	Yes
	<i>Designate marketing responsibilities for this program in an individual's job description (i.e. program director, program coordinator, college communications coordinator, etc.)</i>	Yes
	<i>Secure an annual marketing budget for online program advertising</i>	Yes
	<i>Host a webpage for your online program on the college's website</i>	Yes
	<i>Utilize your college's admissions/recruitment team to track and communicate with perspective distance students</i>	yes

State authorization:	Does this program potentially lead to a professional license or certificate? Yes/No	no
	Is professional licensure a prerequisite for enrollment in the program? Yes/No	yes
	For this program, does your college plan to do any of the following outside of Ohio? Yes/No	
	<i>Establish a physical location for students to receive synchronous or asynchronous instruction</i>	No
	<i>Establish an administrative office or provide office space for staff</i>	No
	<i>Conduct on-ground supervised field experiences such as clinicals, practicums, student teaching or internships</i>	No
	<i>Place more than 10 students simultaneously at a single placement site (such as a hospital)</i>	No
	<i>Require students to meet in person for instructional purposes more than twice per semester</i>	No
	<i>Carry out field study or research at a field station</i>	Yes (current place of employment for Rad Sci 5389)



Use this table to detail all of the courses associated with the program and when you envision these courses will be developed, delivered, etc. For courses that are already developed and available in an online format, please include them and note development concluded in the Developed column.

<i>Course Name</i>	<i>Faculty Lead</i>	<i>OAA Approved for Online Delivery</i>	<i>Developed</i>	<i>Delivered</i>	<i>5 Hour Review (semester immediately following first delivery)</i>	<i>Reviewed (every 3 years)</i>
Example: Principles of Basic Science	J. Smith	AU16	AU16	SP17	SU17	SU19
RadSci 4530- Quality Management in Radiological Sciences	R. Hunter	AU19	SP19	SU19	AU19	SU22
RadSci 3200- Evidence Based Practice in the Radiologic Sciences	R. Hunter	AU19	SP19	SU19	AU19	SU22
RadSci 4326- Management Strategies in Radiologic Sciences	R. Pargeon	SP19	SP19	SP20	SU20	SP23
RadSci 5389- Administration and Quality Management in Radiologic Sciences	R. Hunter	SP19	SP19	SP20	SU20	SU23



Colleges entering into this agreement will:
Secure approval from the following, where applicable: <ul style="list-style-type: none"> • Graduate School • Council on Academic Affairs (CAA) • University Senate • Board of Trustees • Department of Higher Education
Contact the university budget office regarding new program and to request a distance_education-specific fee table. Differential fees must be approved by the Board of Trustees, if applicable.
Meet the program standards set forth by your accrediting body (if applicable) for alternative delivery models
Submit courses for online delivery and any course revisions to curriculum.osu.edu (after CAA approval)
Label students in Student Information System with appropriate subplan. Distance students = subplan ONL
Provide budget forecasting/market analysis using ODEE funding model (attached) <ul style="list-style-type: none"> • Incur the costs for your program specific advertising • Incur additional costs associated with distance education programming (e.g. student advising, increased TA support)
Collaborate with ODEE on state authorizations and state licensure approvals, if applicable <ul style="list-style-type: none"> • Upon request, provide program and faculty information to the state authorization team • Provide required professional licensure board disclosures to potential and enrolled students in writing • Communicate to prospective students their ability to enroll and seek federal financial aid based on state authorizations • Notify ODEE of states/countries where they would like to enroll students • For licensure programs, post a link to the Ohio State Online disclosures page (online.osu.edu/state-authorization/disclosures) on the College program page • Encourage distance education faculty/instructors/students to participate in ODEE distance education training <ul style="list-style-type: none"> ◦ "State Authorization 101" BuckeyeLearn course
Collaborate with ODEE on the technical solutions for effective course delivery: <ul style="list-style-type: none"> • Online-specific syllabus requirements (e.g., ADA statement, Academic Integrity/Academic Misconduct statement) • Ohio State Identity/branding guidelines • Carmen course template providing students with effective navigation and online course expectations, etc. • Provide course content materials for placement into mutually agreed upon formats and technologies for distance delivery • Utilize Quality Matters principles in course design • Focus on outcome-based learning and incorporate assessment into courses
Collaborate with ODEE Instructional Designers to infuse academic integrity best practices into program course development and delivery, including, but not limited to, authentic assessments and online proctoring of examinations.
Encourage distance education faculty/instructors to participate in professional development opportunities, including ODEE's Distance Education Learning and Teaching Academy
Collaborate with relevant student support services (Disability Services, Writing Center, Libraries, Veterans Affairs, etc.) <ul style="list-style-type: none"> • Incur costs to provide required accessibility accommodations for videos and activities not produced by ODEE
Collaborate with ODEE to review and update courses immediately following first delivery and every three years.
Provide at least one required student participation activity per week in each course



- Course designers will implement activities each week of a course to verify enrollment. This is beyond a simple login to a course space, but constitutes a discussion posting, quiz attempt, artifact submission, etc.

Identify student technology support for tools only used by your program.

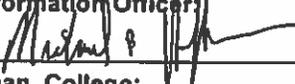
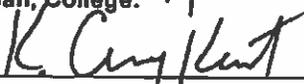
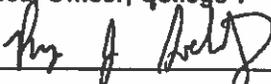
Provide replacement instructor(s) in a timely manner should an instructor separate from the university during the course development process or terminate and postpone course development until a replacement instructor can be identified.



ODEE entering into this agreement will:
<p>Administer state authorization program</p> <ul style="list-style-type: none"> • Necessary to ensure program meets federal student financial aid guidelines • Communicate with the colleges the status of approved state authorizations
<p>Collaborate with the college on the technical solutions for effective course delivery:</p> <ul style="list-style-type: none"> • Online-specific syllabus requirements (e.g., ADA statement, Academic Integrity/Academic Misconduct statement) • Ohio State identity guidelines • Course templates providing students with effective navigation and online course expectations, etc. • Placing course content materials into mutually agreed upon formats and technologies for distance delivery • Utilize Quality Matters principles in course design • Focus on outcome-based learning and incorporate assessment into courses
<p>Collaborate with program faculty and staff to infuse academic integrity best practices into program course development and delivery, including, but not limited to, authentic assessments and online proctoring of examinations.</p>
<p>Provide instructional designer production time during the course development cycle, including the 14-week development process, five-hour review and three-year revision.</p>
<p>Provide distance education professional development opportunities for faculty/instructors/students through ODEE's Distance Education Learning and Teaching Academy</p>
<p>Collaborate with the college to review and update courses immediately following first delivery and every three years</p>
<p>Collaborate with course instructors to provide at least one required student participation activity each week in a course</p> <ul style="list-style-type: none"> • Course designers will implement activities each week of a course to verify enrollment. This is beyond a simple login to a course space, but constitutes a discussion posting, quiz attempt, artifact submission, etc.
<p>Provide distance education faculty and students access to:</p> <ul style="list-style-type: none"> • An OCIO-managed, 24/7, Tier 1 help desk for ODEE/OCIO provided tools/services
<p>Provide Ohio State Online program advertising</p> <ul style="list-style-type: none"> • Two-minute, program-specific introductory video • Consult with college marketing on strategies for program-specific advertising • Program included in general Ohio State Online marketing strategy • Marketing will only be conducted in states/countries in which the program has been authorized
<p>Collaborate with program directors to revise the course development process should an instructor separate from the university during that time. Options include continue work on course through the end of the 14-week development process with a replacement instructor or terminate and postpone course development until a replacement instructor can be identified.</p>

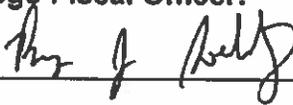
Please note: each service-level agreement will dictate the ODEE products and services utilized



MOU created by:	Marcia Nahikian-Nelms, PhD, RDN, FAND — Director Academic Affairs School of Health and Rehabilitation Sciences	
MOU approved by:	Mike Hofherr, Vice President and Chief Information Officer: 	Date: 1/8/2018
	Dean, College: 	Date: 12/21/18
	Fiscal Officer, College*: 	Date: 12/20/18

**Please review and attach program revenue projection worksheet.*

PROGRAM REVENUE PROJECTION

Approved by:	College Fiscal Officer: 	Date: 12/20/18
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**Office of Distance Education and eLearning (ODEE)
Distance Education Program Revenue Projection - DRAFT**

12/18/18

College:	College of Medicine School of Health and Rehabilitation Sciences
Program Name:	BS Radiological Sciences: Online Degree Completion

Number of Courses:	9
Total Credit Hours	23
Rank	Undergraduate
Residency (in/Out/State Split)	50% eligible

Rank	1st year	2nd year	3rd year	4th year	5th year
Undergraduate					
# of Courses	9 Courses	9 Courses	9 Courses	9 Courses	9 Courses
# of Students	15 Students	25 Students	35 Students	45 Students	50 Students
# of Credit Hours	23 Cr Hours	23 Cr Hours	23 Cr Hours	23 Cr Hours	23 Cr Hours
Total Credit Hours of Instruction	345.0 Hours	467.0 Hours	640.0 Hours	810.0 Hours	987.5 Hours
Instructional Fee					
Fees - Effective Rates	\$390.84	\$390.84	\$390.84	\$390.84	\$390.84
State Subsidy	\$218.27	\$218.27	\$218.27	\$218.27	\$218.27
Projected Fees	\$67,540	\$137,310	\$204,740	\$272,170	\$334,050
Projected Subsidy	\$18,616	\$43,980	\$65,750	\$92,530	\$117,970
Projected Revenue Generated	\$0	\$143,330	\$270,590	\$364,640	\$452,080

Marginal Revenue	\$0	\$86,740	\$114,840	\$162,110	\$115,400
Support Units Tax rate	24%	24%	24%	24%	24%
Support Units Tax	\$0	\$20,700	\$27,600	\$39,000	\$27,600
Cumulative Support Units Tax	0	20,700	48,300	87,300	114,900
Net Margin	\$0	\$65,550	\$87,240	\$125,110	\$87,400

Colleges Share %	70%	70%	80%	80%	80%
Colleges Share - Annual PBA	\$0	\$45,890	\$69,910	\$57,430	\$69,920
Colleges Share (Cumulative Cash Generated)	\$0	\$45,890	\$115,800	\$168,230	\$238,150

ODEE Share %	30%	30%	20%	20%	20%
ODEE Share Annual PBA	\$0	\$14,000	\$17,690	\$15,100	\$17,480
ODEE Share (Cumulative Cash Generated)	\$0	\$14,000	\$32,300	\$47,400	\$64,880

Current Budget Model:					
SSA 1 - Student Service Assessment 1 - UG - \$118.12	\$20,380	\$47,540	\$67,920	\$67,920	\$95,090
SSA 2 - Student Service Assessment 2 - Grad - \$492.26	\$0	\$0	\$0	\$0	\$0
SSA 3 - Student Service Assessment 3 - \$4.36	\$750	\$1,750	\$2,510	\$2,510	\$3,510
Total Current Assessments	\$0	\$21,130	\$49,290	\$70,430	\$98,600

College Assessment savings under new model	\$0	\$1,470	\$12,160	\$20,200	\$30,890
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Assumptions:

No other Student Services Assessments would apply to Colleges under this model.
The Distance Education assessment applies to marginal revenues.
The Distance Education assessment only apply to students who are 100% distance Ed.
No inflationary adjustment is taken for instructional fees.
The projected numbers in this model are best estimates and the actual allocations might be slightly different.

Revenue and Assessments Calculation is based on the following Current FY19 rates:

	Fees	Subsidy
Undergraduate	\$390.84	\$218.27
Graduate	\$1,025.55	\$399.54