The Weber State University Dr. Ezekiel R. Dumke College of Health Professions, in cooperation with affiliated clinical facilities and other departments on the campus, offers an expanding program for the education and training of health care professionals. The programs emphasize an integration of basic sciences, discipline-specific skills and knowledge, clinical experiences, and liberal arts which enable the graduate to make a maximum contribution to patient care as a member of the health care team.

Through the organization of the health science educational programs in one college, a common core curriculum is operational which fosters the team concept of health care and the integration and application of the basic biomedical sciences to patient needs.

Assistant Dean: Dr. Craig Gundy
Location: Marriott Allied Health Bldg., Suite 401 Telephone Contact: Marci Stone 801-626-7117
Admissions Advisement: 801-626-6128

Degrees Offered
Bachelor of Arts and Bachelor of Science degree programs are offered in the following areas:
- Clinical Laboratory Science
- Dental Hygiene
- Emergency Care & Rescue
- Health Administrative Services
- Health Information Technology
- Nursing
- Radiologic Sciences
- Respiratory Therapy

Associate of Science degree programs are offered in:
- Clinical Laboratory Science
- Dental Hygiene
- Emergency Care & Rescue
- Health Administrative Services
- Health Information Management
- Health Promotion
- Health Services Administration
- Long Term Care Administration

Certificates are offered in:
- Clinical Lab
- Diagnostic Medical Sonography
- Emergency Medical Technician
- Health Services Administration (graduate certificate) pending approval
- Nuclear Medicine
- Practical Nursing
- Respiratory Therapy

Program Directors & Department Chairs (area code 801)
Clinical Laboratory Sciences: Dr. Yasmen Simonian 626-6118
Dental Hygiene: Ms. Stephanie Bossenberger-James 626-6451
Emergency Care and Rescue: Mr. Jeff Grunow 626-6521
Health Sciences: Dr. Marie Kotter 626-6505
Health Administrative Services: Dr. Ken Johnson 626-7242
Nursing: Dr. Debra Huber 626-6142
Radiologic Sciences: Dr. Robert Walker 626-6120
Respiratory Therapy: Ms. Georgine Bills 626-7071
The WSU Clinical Laboratory Technician (CLT) Online-program offers the employees of clinical laboratories an opportunity to complete an AAS degree in clinical laboratory sciences. Graduates of the program are eligible to take national exams to become certified as clinical laboratory technicians (CLT) or medical laboratory technicians (MLT). Students admitted to the online AAS degree program are expected to meet the same department requirements, policies, and outcomes as the on-campus students. Laboratory competencies will be met at the students' respective work facilities. Please refer to the Employer Support Information on the CLS Department web site, weber.edu/cls.

Both the BS and AAS programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). As such, graduates are eligible for several options for national certification including ASCP and NCA.

Clinical Laboratory Assistant
To meet the need for clinical laboratory competencies in a rapidly changing health care system, the CLS program offers an intensive Certificate Program, which provides applied core clinical laboratory skills required primarily for testing performed in physician office labs (POL's) and other decentralized testing sites. These sites mostly perform waived or moderately complex testing as defined within the Clinical Laboratory Improvement Act of 1988 (CLIA 88). The latter program is offered during Summer Semester at times that are compatible with individuals working full time during the day.

Program Admissions

Bachelor's Degree as a Clinical Laboratory Scientist
Students must have completed a CLT program and/or be CLT certified, meet with a CLS faculty advisor and submit an application complete with a non-refundable $20 fee by May 1st of the year they wish to enter the program.

Associate of Applied Science Degree

Clinical Laboratory Technician
Students must meet with a CLS faculty advisor, complete the pre-application courses listed in the CLT Admissions Requirements and make application to the program by May 1st of the year they wish to enter the program. There is a $20 non-refundable application fee for the program.

Certificate Program
The program is offered to individuals employed in the health care desiring a core of clinical laboratory skills. The program is designed to encourage medical assistants, phlebotomists, certified nursing practitioners and similar health care workers to achieve competencies that will better serve patient care in settings requiring basic laboratory testing as a part of the facility's health care services. The program's courses are directed toward achieving entry level competencies required for accurate performance of basic laboratory testing under the regulations set forth through CLIA 88 waived and moderately complex testing protocols under the direct supervision of laboratory directors and/or supervisors.

Interested individuals will need to contact the program office for advisement and further details.

Pre-Med/Pre-Dental/Pre-Vet/Pre-Professional
Since the BS/CLS program offers in a bachelor's degree in an applied medical science, it offers an attractive alternate approach to traditional pre-professional degree tracks. The program has specific course integration with other required pre-professional course requirements. See a CLS faculty advisor for more specific information.
**CLINICAL LABORATORY SCIENTIST (CLS) MAJOR**

**BACHELOR DEGREE (B.S.)**

- **Program Prerequisite:** Completion of A.A.S. Degree requirements and/or CLT certification. Students must have CLT certification as a clinical laboratory technician if transferring from another college or university's technician program.

- **Minor:** A minor is not required, but minors are available in chemistry and microbiology with successful completion of additional courses as specified by the department offering the minor.

- **Grade Requirements:** A grade of "B-" or better in all CLS courses. A grade of "C-" or better in all support courses. Minimum cumulative GPA of 2.00.

- **Credit Hour Requirements:** A total of 129 credit hours is required for graduation. 67 of these are required CLS courses, are required support courses, and 29 are required general education courses.

### Advisement

All clinical laboratory sciences students are required to meet with a faculty advisor prior to application. Thereafter, advisement each semester is recommended. Call 801-626-6118 for more information or to schedule an appointment.

### Admission Requirements

- Completion of WSU CLT program and/or CLT/MLT certification.
- Transfer students must have CLT/MLT certification.
- Declare 2AO CLS Applicant as your program of study.
- Completion of WSU CLT program and/or CLT/MLT certification.
- A grade of "B-" or better in all CLS courses.
- A grade of "C-" or better in all support courses. Minimum cumulative GPA of 2.00.
- Transfer students must have CLT/MLT certification.

### Courses Required for Junior and Senior Curriculum (33 credit hours)

Select one of the following tracks:

- **Track I**
  - CLS 3302/3302L Advanced Clinical Lab Practices I (4)
  - CLS 3311/3311L Advanced Clinical Immunohematology (3)
  - CLS 3313/3313L Advanced Clinical Hematology & Hemostasis I (4)
  - CLS 3314/3314L Advanced Clinical Chemistry (3)
  - CLS 3316/3316L Advanced Clinical Microbiology (3)
  - CLS 4401 Working Laboratory Theory I (1)
  - CLS 4405 Working Laboratory Theory II (1)
  - CLS 4409 Clinical Correlation (1)
  - CLS 4414 Laboratory Teaching/Supervision I (2)
  - CLS 4417 Laboratory Teaching/Supervision II (1)
  - CLS 4442 Applied Working Laboratory I (4)
  - CLS 4446 Applied Working Laboratory II (4)
  - CLS 4453 Supervised Clinical Experience I (1)
  - CLS 4454 Supervised Clinical Experience II (1)

### Track II

- CLS 3302/3302L Advanced Clinical Lab Practices I (4)
- CLS 3311/3311L Advanced Clinical Immunohematology (3)
- CLS 3313/3313L Advanced Clinical Hematology & Hemostasis I (4)
- CLS 3314/3314L Advanced Clinical Chemistry (3)
- CLS 3316/3316L Advanced Clinical Microbiology (3)
- CLS 4409 Clinical Correlation (1)
- CLS 4453 Supervised Clinical Experience I (1)
- Chem 3230 Organic Chemistry (5)
- Chem 3070 Biochemistry I (4)
- Zool 3300 Genetics (4)

### Required Support Courses (36 credit hours)

- Chem PS/SI1110 Principles of Chemistry (5)*
- or Chem PS/SI1110 Elementary Chemistry (5)*
- or Chem S 1120 Principles of Chemistry (5)*
- or Chem S 1120 Elementary Organic/Biochemistry (5)*
- or HthSci LS1110 Biomedical Core (4)
- or Zool 2200 Human Physiology (4)
- or HthSci LS1110 Biomedical Core Lab (4)
- or Zool 2100 Human Anatomy (4)
- or Phsx PS/SI1010 Intro to Physics (3)
- or Micro LS/SI2054 Principles of Microbiology (4)
- or Micro LS/SI1113 Intro to Microbiology (3)
- or Micro 3325 Immunology (4)
- or Micro 3328 Pathophysiology of Cells & Tissues (2)
- or HthSci 3328 Pathophysiology of Organs & Systems (2)
- or Micro 3305 Medical Microbiology (5)
- or Micro 3603 Advanced Microbiology for the Health Professions (3)

* Students seeking an A.A.S. or a B.S. degree are required to complete a minimum of two semesters of Chemistry to include an Organic or Biochemistry course.
### Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 2003</td>
<td>Applied Lab Math &amp; Lab Statistics (3)</td>
</tr>
<tr>
<td>Chem 2320</td>
<td>Organic Chemistry II (4)*</td>
</tr>
<tr>
<td>Chem 3050</td>
<td>Instrumental Analysis (3)</td>
</tr>
<tr>
<td>Chem 3070</td>
<td>Biochemistry (4)*</td>
</tr>
<tr>
<td>HIM 3010</td>
<td>Information Technology</td>
</tr>
<tr>
<td>HIM SI3200</td>
<td>Epidemiology &amp; Biostatistics (3)</td>
</tr>
<tr>
<td>HthSci 2230</td>
<td>Introductory Pathophysiology (4)</td>
</tr>
</tbody>
</table>

*Required for CLS Track II

** Equivalencies to Biomedical Core (HthSci 1110 and HthSci 1111)**

### Suggested Course Sequence

Please refer to this program in the on-line catalog (weber.edu/catalog) and/or contact the department for a suggested course sequence.

### Distance Education Online Clinical Laboratory Scientist (CLS) Major

#### Bachelor Degree (B.S.)

For more information about the distance education online program, please contact Yasmen Samonion, Department Chair, at (801) 626-7080 or ysimonian@weber.edu, or Amanda Harden, CLS Department secretary, at (801) 626-6118, or Kara Hansen-Suchy, CLS Online Programs Coordinator at (801) 848-7770, ext 8138, or khansen-suchy@weber.edu, or visit the CLS Homepage at www.weber.edu/cls.

#### Associate of Applied Science Degree (A.A.S.)

**Program Prerequisite:** Students must meet with a CLS faculty advisor, complete the pre-application courses listed under the Admission Requirements below and make application by May 1st of the year they wish to enter the program. Refer to Admission Requirements below.

**Grade Requirements:** A grade of "C-" or better in all CLS courses. A grade of "C." or better in all support courses. Minimum cumulative GPA of 2.0.

**Credit Hour Requirements:** A total of 68 credit hours is required for graduation. 34 of these are required CLS courses, 22 are required support courses, and 12 are required general education courses.

### Advisement

It is to the student's advantage to meet with a CLS faculty advisor prior to beginning the program curriculum. All clinical laboratory science students are required to meet with a faculty advisor prior to application. The program will not accept the student's application until this requirement is met. After initial advisement, students may meet with advisors as needed. Call 801-626-6118 for more information or to schedule an appointment.

### Admissions Requirements

1. Advisement with a CLS faculty advisor.
2. Declare 2AP CLT Applicant as your program of study.
3. Complete the following requirements with a letter grade:
   1. of the following courses in chemistry
      - Chem PS/SI1110: Elementary Chemistry (5)
      - Chem PS/SI1210: Principles of Chemistry (5)
   2. Course in biomedical core
      - HthSci LS1110: Biomedical Core (4)
      - or Zool 2200: Human Physiology (4)
   3. 1 course from the following
      - Chem SI1120: Elementary Organic/Biochemistry (5)
      - Chem SI1220: Principles of Chemistry II (5)
      - HthSci SI1111: Biomedical Core Lab (4)
      - or Zool 2100: Human Anatomy (4)
      - or Phsx PS/SI1010: Intro to Physics (3)
      - or Chem SI1113/SI113L: Intro to Clinical Lab Practices (4)

Submit application and a non-refundable $20 fee to DCHPAdmission and Counseling office by May 1. For more information, contact the CLS office at 801-626-6118.

Students interested in the CLT A.A.S. Online program admission requirements, please refer to www.weber.edu/cls.

### General Education

Refer to pages 36-41 for Associate of Applied Science requirements. The following required courses will fill both program requirements and general education requirements in the Life and Physical Sciences areas: Chem PS/SI1110, Chem PS/SI1210, HthSci LS1110, Micro LS1113, Micro LS/SI2054, and Phsx PS/SI1010. Remaining general education requirements can be fulfilled by taking the required 12 credit hours from each of the following areas:

- 3 credit hours Composition
- 3 credit hours Communication
- 3-5 credit hours Computer Literacy
- 3 credit hours Creative Arts & Humanities
- 3 credit hours Social Sciences

Some requirements may be met by ACT, CLEP, and/or AP scores as designated by the University (contact the Admissions Office for more information).

### Course Requirements for A.A.S. Degree

#### CLS Courses Required (34 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 1113/1113L</td>
<td>Introduction to Clinical Practice (4)</td>
</tr>
<tr>
<td>CLS 1123/1123L</td>
<td>Principles of Clinical</td>
</tr>
<tr>
<td>CLS 1154</td>
<td>Supervised Clinical Experience First Year (1)</td>
</tr>
<tr>
<td>CLS 2211/2211L</td>
<td>Principles of Clinical Chemistry I (5)</td>
</tr>
<tr>
<td>CLS 2212/2212L</td>
<td>Principles of Clinical Microbiology I (4)</td>
</tr>
<tr>
<td>CLS 2213/2213L</td>
<td>Principles of Clinical Chemistry II (5)</td>
</tr>
<tr>
<td>CLS 2214/2214L</td>
<td>Principles of Clinical Microbiology II (4)</td>
</tr>
<tr>
<td>CLS 2215/2215L</td>
<td>Principles of Clinical</td>
</tr>
<tr>
<td>CLS 2256</td>
<td>Supervised Clinical Experience I (1)</td>
</tr>
<tr>
<td>CLS 2257</td>
<td>Supervised Clinical Experience II (1)</td>
</tr>
</tbody>
</table>

#### Support Courses Required (24-25 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem PS/SI1110</td>
<td>Elementary Chemistry (5)</td>
</tr>
<tr>
<td>Chem SI1120</td>
<td>Elementary Organic/Biochemistry (5)</td>
</tr>
<tr>
<td>Chem SI1110*</td>
<td>Principles of Chemistry II (5)</td>
</tr>
<tr>
<td>HthSci SI1110*</td>
<td>Biomedical Core (4)</td>
</tr>
<tr>
<td>HthSci SI1111*</td>
<td>Biomedical Core Lab (4)</td>
</tr>
<tr>
<td>CLS 2003</td>
<td>Applied Lab Math &amp; Lab Statistics (3)</td>
</tr>
<tr>
<td>Micro LS1113</td>
<td>Intro to Microbiology (3)</td>
</tr>
<tr>
<td>or Micro LS/SI2054</td>
<td>Principles of Microbiology (4)</td>
</tr>
</tbody>
</table>

* Equivalencies to Biomedical Core (HthSci 1110 and HthSci 1111):
  - Zool 2200: Human Physiology (4)
  - and Zool 2100: Human Anatomy (4)
  - or Phsx PS/SI1010: Intro to Physics (3)

### Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM SI3200</td>
<td>Epidemiology &amp; Biostatistics (3)</td>
</tr>
<tr>
<td>HthSci 2230</td>
<td>Intro Pathophysiology (3)</td>
</tr>
</tbody>
</table>
Suggested Course Sequence

Please refer to this program in the on-line catalog (weber.edu/catalog) and/or contact the department for a suggested course sequence.

DISTANCE EDUCATION ONLINE

CLINICAL LABORATORY TECHNICIAN
(CL T) MAJOR

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)

For more information about the distance education online program, please contact Yasm Simion, Department Chair, at (801) 626-7080 or ysimion@weber.edu, or Amanda Harden, CLS Department secretary, at (801) 626-6118, or Kara Hansen-Suchy, CLS Online Programs Coordinator at (801) 626-6118, or k Hansen-suchy@weber.edu, or visit the CLS Homepage at www.weber.edu/cls.

CLINICAL LABORATORY ASSISTANT (CLA)

CERTIFICATE PROGRAM

For more information about the certificate program, please contact Yasm Simion, Department Chair, at (801) 626-7080 or ysimion@weber.edu, or Amanda Harden, CLS Department secretary, at (801) 626-6118, or Kara Hansen-Suchy, CLS Online Programs Coordinator at (801) 626-6118, or k Hansen-suchy@weber.edu, or visit the CLS Homepage at www.weber.edu/cls.

CLINICAL LABORATORY SCIENCES COURSES - CLS

*Acceptance into the CLT program required

**Acceptance into the CLS program required

CLS 1000. Core Clinical Laboratory Skills (3)

The CLS 1000 course is designed to teach core clinical laboratory skills to individuals from various health care professions. The curriculum will focus on basic laboratory methods in quality control, quality assurance, information recording and transfer, normal and abnormal laboratory values, and problem recognition. Students will receive basic technical instruction in phlebotomy, specimen collection and processing, and laboratory instrumentation in the areas of hematology, serology, urinalysis, and clinical chemistry. Prerequisite: Department Approval.

CLS 1001. A Case Study Approach to the Health Sciences (2)

A Case Study Approach to the Health Sciences is a WSU Online course designed for students wishing to explore health professional career paths using case study models. Each case study focuses on a disease process. Progression through each case study involves a review of anatomy and physiology, pathophysiology, medical terminology, and a study of health professionals including their educational and training requirements. Additionally, the student will explore key medical diagnostic tests (e.g., laboratory, imaging) used in patient disease diagnosis, management and prevention. The course emphasizes the importance of the team approach to patient care. Cross listed with HthSci 1001.

CLS 1113. Introduction to Clinical Laboratory Practices (4)

Principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing.

CLS 1113L. Introduction to Clinical Laboratory Practices Lab (0)

Laboratory session for CLS 1113. Principles and applications to laboratory testing including safe practices for the laboratory practitioner, specimen quality assurance, phlebotomy, urinalysis, basic concepts in clinical immunology, and clinical approaches to immunological testing.

CLS 1123. Principles of Hematology and Hemostasis (5) S


CLS 1154. Supervised Clinical Experience First Year (1)

Off-campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Prerequisite: CLS 1113 and 1123.

CLS 2203. Applied Laboratory Mathematics and Laboratory Statistics (3) F

A discipline-specific course which tailors applied laboratory mathematics and clinical statistics to all areas of the clinical laboratory with emphasis in clinical chemistry. Topics include regent preparation, specimen dilution protocols, quality assurance and quality control, practical applications of common statistical tests, and statistical analysis using Microsoft Excel. The course is designed to complement the mathematics component of Clinical Chemistry CLS 2211 and CLS 2213.

CLS 2211. Principles of Clinical Chemistry I* (5) F

Basic concepts and techniques in clinical chemistry and quality control utilizing manual and automated laboratory procedures. Emphasis on blood and body fluid assessments of carbohydrates, bilirubin, non-protein nitrogen testing and electrolyte acid/base balance. Prerequisite: Chem PS/SI1110 and Chem SI1120 or Chem PS/SI1120 and SI1220.

CLS 2212. Principles of Clinical Microbiology I* (4) F

This course provides an in-depth coverage of clinically significant bacteria including epidemiology, pathogenecity, procedures for traditional laboratory identification and antimicrobial testing. Prerequisite: Micro LS1113 or Micro LS’S 2054 may be taken concurrently.

CLS 2213. Principles of Clinical Chemistry II* (5) S

Continuation of CLS 2211 with the introduction to methods for the assessment of proteins, lipids, enzymology, therapeutic drug monitoring, toxicology and basic endocrinology. Prerequisite: CLS 2211.

CLS 2214. Principles of Clinical Microbiology II* (4) S

This course is a continuation of CLS 2212 including, clinical microbiology, virology, parasitology and miscellaneous clinical bacteria. Prerequisite: CLS 2212, Micro LS1113 or Micro LS’S 2054.

CLS 2215. Principles of Clinical Immunohematology* (4) S

Lecture and laboratory covering the theory and principles of Immunohematology relevant to blood group serology, antibody detection and identification, compatibility testing, component preparation and therapy in blood transfusion service, quality control parameters, donor screening and phlebotomy, transfusion reactions and hemolytic disease of the newborn. Prerequisite: CLS 1113.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 2256</td>
<td>Supervised Clinical Experience I** (1) Su. F. S</td>
</tr>
<tr>
<td></td>
<td>Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Prerequisite: CLS 2211, 2212, 2213, 2214, 2215.</td>
</tr>
<tr>
<td>CLS 2257</td>
<td>Supervised Clinical Experience II** (1) Su. F. S</td>
</tr>
<tr>
<td></td>
<td>Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Prerequisites: CLS 2211, 2212, 2213, 2214 and 2215.</td>
</tr>
<tr>
<td>CLS 2830</td>
<td>Directed Readings* (1-3) F. S</td>
</tr>
<tr>
<td></td>
<td>Topics in Laboratory Medicine under the direction of departmental faculty advisor. May be repeated for a maximum of 6 hours.</td>
</tr>
<tr>
<td>CLS 2920</td>
<td>Short Courses, Workshops, Institutes and Special Programs* (1-3)</td>
</tr>
<tr>
<td></td>
<td>Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.</td>
</tr>
<tr>
<td>CLS SI3302</td>
<td>Advanced Clinical Laboratory Practices I* (4) F</td>
</tr>
<tr>
<td></td>
<td>Advanced theory to include laboratory instrument systems comparison, evaluation, and CLIA 88 validation procedures with emphasis on scientific research design and statistical analysis. Interrelated topics in the clinical laboratory sciences to include educational strategies for laboratory personnel, approaches to workload management, budgeting and marketing strategies for laboratory services. Students also learn about and evaluate the new diagnostic technology available to clinical laboratories, as well as learning how to select, evaluate, design, perform, and document CLIA-88 acceptable validations studies on new chemistry instrumentation or analytical methods. Interrelated topics in the clinical laboratory to include workload management, designing and implementing standards for quality assurance, budgeting laboratory operations, and investigative concepts related to new method and instrument evaluation, selection, and validation.</td>
</tr>
<tr>
<td>CLS 3311</td>
<td>Advanced Clinical Immunohematology** (3) F</td>
</tr>
<tr>
<td></td>
<td>Advanced blood banking theory and specialized procedures as they pertain to transfusion of whole blood and blood components; Quality Assurance and Regulatory issues pertaining to Transfusion Medicine. Prerequisite: CLS 2215.</td>
</tr>
<tr>
<td>CLS 3313</td>
<td>Advanced Clinical Hematology and Hemostasis** (4) F</td>
</tr>
<tr>
<td></td>
<td>Correlation of clinical laboratory hematology and hemostasis with emphasis on hemopathology specialized procedures and hematological abnormalities in human cellular components. Routine and specialized coagulation procedures will also be used to detect hemorrhagic and thrombotic problems. Prerequisite: CLS 1123.</td>
</tr>
<tr>
<td>CLS SI3314</td>
<td>Advanced Clinical Chemistry** (3) S</td>
</tr>
<tr>
<td></td>
<td>This problem-solving oriented course presents the correlation of clinical chemistry test results to organ-related diseases, such as renal, hepatic, and endocrine diseases. The students will learn how to use clinical correlation as a quality assurance tool to detect patient testing errors. Students also learn about and evaluate the new diagnostic technology available to clinical laboratories, as well as learning how to select, evaluate, design, perform, and document CLIA-88 acceptable validations studies on new chemistry instrumentation or analytical methods. Interrelated topics in the clinical laboratory to include workload management, designing and implementing standards for quality assurance, budgeting laboratory operations, and investigative concepts related to new method and instrument evaluation, selection, and validation. Additionally, Therapeutic Drug Monitoring and Toxicology studies are presented.</td>
</tr>
<tr>
<td>CLS 3316</td>
<td>Advanced Clinical Microbiology** (3) S</td>
</tr>
<tr>
<td></td>
<td>Correlation of laboratory and clinical information in clinical microbiology. Method analysis and evaluation. Students research and present in written and oral formats case histories and current topics with emphasis on the laboratory recognition of infectious diseases. Prerequisite: Micro 3305 or Micro 3603 may be taken concurrently.</td>
</tr>
<tr>
<td>CLS 4401</td>
<td>Working Clinical Laboratory Theory I** (1) F</td>
</tr>
<tr>
<td></td>
<td>A continuation of CLS 4401. Simulated processes of providing all facets of clinical laboratory services. Prerequisites: CLS 4401 and 4442. CLS 4446 must be taken concurrently.</td>
</tr>
<tr>
<td>CLS 4405</td>
<td>Working Clinical Laboratory Theory II** (1) S</td>
</tr>
<tr>
<td></td>
<td>A continuation of CLS 4401. Simulated processes of providing all facets of clinical laboratory services. Prerequisites: CLS 4401 and 4442. CLS 4446 must be taken concurrently.</td>
</tr>
<tr>
<td>CLS 4414</td>
<td>Laboratory Teaching and Supervision I** (2) F</td>
</tr>
<tr>
<td></td>
<td>Students will work with a faculty member teaching one of the first year or certificate courses. Students are expected to apply sound educational and performance evaluation strategies set forth in CLS 3302. Students also are presented the opportunity to refine their interpersonal skills through a teaching/learning process specifically designed for the clinical laboratory scientist. Prerequisite: CLS 3302.</td>
</tr>
<tr>
<td>CLS 4417</td>
<td>Laboratory Teaching and Supervision II** (1) S</td>
</tr>
<tr>
<td></td>
<td>Continued processes set forth in CLS 4414. Students will work with a faculty member teaching one of the second year courses which are contain more technically demanding material. Students are expected to apply sound educational and performance evaluation strategies set forth in CLS 4414. Students also are presented the opportunity to refine their interpersonal skills through a teaching/learning process specifically designed for the clinical laboratory scientist. Prerequisites: CLS 4414.</td>
</tr>
<tr>
<td>CLS 4442</td>
<td>Applied Working Laboratory I** (4) F</td>
</tr>
<tr>
<td></td>
<td>Project-based applications set forth in CLS 4401. Students staff a simulated clinical laboratory and assume responsibilities associated with all facets of laboratory operations. Clinical and academic faculty serve as advisors/managers to each team of students. The process develops team building skills critical to the modern health care setting. Prerequisite: CLS 4401 must be taken concurrently.</td>
</tr>
<tr>
<td>CLS 4446</td>
<td>Applied Working Laboratory II** (4) F</td>
</tr>
<tr>
<td></td>
<td>A continuation of project-based applications set forth in CLS 4401. Students staff a simulated clinical laboratory and assume responsibilities associated with all facets of laboratory operations. Clinical and academic faculty serve as advisors/managers to each team of students. The process develops team building skills critical to the modern health care setting. CLS 4446 expands to examine issues that cross all health care disciplines. Prerequisites: CLS 4401 and 4442. CLS 4405 must be taken concurrently.</td>
</tr>
</tbody>
</table>
CLS 4453. Supervised Clinical Experience I** (1) Su, F, S
Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Emphasis on experiences associated with laboratory administrative functions. Prerequisites: CLS 3311, 3313, 3314 and 3316.

CLS 4454. Supervised Clinical Experience II** (1) Su, F, S
Off campus supervised clinical experiences administered in conjunction with clinical faculty in WSU affiliated health care institutions. Emphasis on experiences associated with laboratory administrative functions. Prerequisites: CLS 3311, 3313, 3314 and 3316

CLS 4800. Special Problems** (1-3) F, S
Prerequisite: Consent of instructor prior to registration.

CLS 4830. Directed Readings** (1-3) F, S
Advance topics related to the correlation of clinical laboratory data to disease processes. Students may work as a group or independently with academic or clinical faculty.

CLS 4920. Short Courses, Workshops, Institutes and Special Programs** (1-3) F, S
Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

** D E P A R T M E N T  D E N T A L  H Y G I E N E **

Department Chair: Ms. Stephanie Bossenberger-James, RDH, M.S.
Location: Allied Health, Room 475
Telephone Contact: Karen Bateman 801-626-6130
Professors: Stephanie Bossenberger-James, Frances L. McConaughy;
Assistant Professors: Sue Dougherty, Joy Gall; Instructor:
Kami Hanson

The dental hygienist is a health educator concerned with the prevention of dental disease. Dental hygienists perform their services under the supervision of licensed dentists, and are the only members of the dental team who are licensed to perform a service directly to the client. Dental hygienists provide oral health education, remove deposits from around the teeth and gums, expose dental radiographs and deliver other treatments to prevent and manage dental disease.

The dental hygiene curriculum is three years in length. The first year may be completed at any accredited college or university and consists of pre dental hygiene courses. These courses include: chemistry, anatomy, physiology, microbiology, English, speech, psychology, sociology, nutrition and CPR. This year of pre-dental hygiene courses is followed by two years of specialized study in dental hygiene. These courses include:

- Dental Science Courses Required (7 credit hours)*
  - DenSci 4530 - Principles and Application of Evidence-based Dental Hygiene Practice, three from DenSci SI4780 - Baccalaureate Thesis, and two from DenSci 4890 - Advanced Community or Clinical Work Experience. DenSci SI4780 may be used to fulfill 3 credit hours of the WSU scientific inquiry B.S. requirement.
  - DenSci SI4780*
  - DenSci 4890 - Advanced Community or Clinical Work Experience (2)

A prerequisite to the Baccalaureate Thesis course is an upper division Research and Statistics course (numbered 3000 or above, minimum of 3 cr hrs). Thirteen more upper division hours are selected by the student from a menu of courses. Transcripts of transfer students will be evaluated on an individual basis. Transfer students must also complete the residency requirement (30 credit hours of WSU course work).

Advisement

Bachelor of Science Dental Hygiene majors must complete a contract with the Dental Hygiene Department Chair prior to beginning the advanced courses.

Course Requirements for B.S. Degree

To be taken in addition to the courses required for an Associate’s Degree in Dental Hygiene.

Dental Science Courses Required (7 credit hours)*

A total of seven additional DenSci credit hours are required: two from DenSci 4530 - Principles and Application of Evidence-based Dental Hygiene Practice, three from DenSci SI4780 - Baccalaureate Thesis, and two from DenSci 4890 - Advanced Community or Clinical Work Experience. DenSci SI4780 may be used to fulfill 3 credit hours of the WSU scientific inquiry B.S. requirement.

Dental Hygiene

**BACHELOR DEGREE (B.S.)**

Program Prerequisite: Successful completion of an Associate’s Degree in Dental Hygiene, National Board Examination and a Regional or State Practical Exam. Maintenance of a current dental hygiene license.

Minor: Not Required.

Grade Requirements: All courses required for the major must be successfully completed with a grade of “C” or better (a “C-” grade is not acceptable).

Credit Hour Requirements: A total of 120 credit hours is required for graduation - 88 of these are taken for the A.S. degree and an additional 7 must be taken to complete the B.S. in Dental Hygiene degree. A prerequisite to the Baccalaureate Thesis course is an upper division Research and Statistics course (numbered 3000 or above, minimum of 3 cr hrs). Thirteen more upper division hours are selected by the student from a menu of courses. Transcripts of transfer students will be evaluated on an individual basis. Transfer students must also complete the residency requirement (30 credit hours of WSU course work).

Advisement

Bachelor of Science Dental Hygiene majors must complete a contract with the Dental Hygiene Department Chair prior to beginning the advanced courses.

Course Requirements for B.S. Degree

To be taken in addition to the courses required for an Associate’s Degree in Dental Hygiene.

Dental Science Courses Required (7 credit hours)*

A total of seven additional DenSci credit hours are required: two from DenSci 4530 - Principles and Application of Evidence-based Dental Hygiene Practice, three from DenSci SI4780 - Baccalaureate Thesis, and two from DenSci 4890 - Advanced Community or Clinical Work Experience. DenSci SI4780 may be used to fulfill 3 credit hours of the WSU scientific inquiry B.S. requirement.

Dental Hygiene

**ASSOCIATE OF SCIENCE DEGREE (A.S.)**

Program Prerequisite: Completion of the prerequisite courses listed under the Admission Requirements below.

Grade Requirements: Prerequisite course work must meet a standard of 2.25 GPA. All courses required for the major must be successfully completed with a grade of “C” or better (a “C-” grade is not acceptable).
Applicants to the program must complete a specific application process. The application package will call for letters of reference, current transcripts and ACT scores, and verification of previous health-related work experience. Applicants are required to take a dexterity test offered through the WSU Testing Center. The Admissions Office will mail out brochures and applications upon request. Individual counseling appointments can be made for direct assistance.

**Admission Requirements**
The science prerequisite courses are listed below and must be completed with a minimum GPA of 2.25 prior to being admitted into the program. These basic science courses must have been taken within five years of the date of anticipated enrollment in the Dental Hygiene Program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zool 2100</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>Zool 2200</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>Chem PS1010</td>
<td>Intro to Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>Micro LS1113</td>
<td>Intro Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

The Biomedical Core (HlthSci 1110 and HlthSci 1111) may be substituted for the four courses listed above. This core will award 4 credit hours to the General Education requirement of Life and Physical Sciences. Five more approved credit hours will be needed to fulfill this category of the general education requirements. At least one course in the additional five hours must be a Physical Science approved general education course.

Other prerequisite courses include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HlthSci 2230</td>
<td>Intro Pathophysiology</td>
</tr>
<tr>
<td>Engl EN1010</td>
<td>Intro to Writing</td>
</tr>
<tr>
<td>Engl EN2010</td>
<td>Intermediate Writing</td>
</tr>
<tr>
<td>Psych SS1010</td>
<td>Intro Psychology</td>
</tr>
<tr>
<td>Sociol SS/DV1010</td>
<td>Principles of Sociology</td>
</tr>
<tr>
<td>Comm HU1020</td>
<td>Principles of Public Speaking</td>
</tr>
<tr>
<td>Nutri LS1020</td>
<td>Foundations in Nutrition</td>
</tr>
</tbody>
</table>

**Course Requirements for A.S. Degree**

**Dental Science Courses Required**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DenSci 2201</td>
<td>Concepts of Community Dental Health</td>
<td>1</td>
</tr>
<tr>
<td>DenSci 2205</td>
<td>Head/Neck and Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DenSci 2206</td>
<td>Clinical Dental Hygiene/Radiology</td>
<td>4</td>
</tr>
<tr>
<td>DenSci 2207</td>
<td>Dental Hygiene I</td>
<td>3</td>
</tr>
<tr>
<td>DenSci 2208</td>
<td>Radiology</td>
<td>2</td>
</tr>
<tr>
<td>DenSci 2211</td>
<td>Oral Pathology</td>
<td>3</td>
</tr>
<tr>
<td>DenSci 2215</td>
<td>Periodontology</td>
<td>2</td>
</tr>
<tr>
<td>DenSci 2216</td>
<td>Clinical Dental Hygiene II</td>
<td>3</td>
</tr>
<tr>
<td>DenSci 2217</td>
<td>Dental Hygiene II</td>
<td>3</td>
</tr>
<tr>
<td>DenSci 2219</td>
<td>Dental Materials</td>
<td>1</td>
</tr>
<tr>
<td>DenSci 2235</td>
<td>Dental Medicine I</td>
<td>2</td>
</tr>
<tr>
<td>DenSci DV2250</td>
<td>Professional Ethics</td>
<td></td>
</tr>
<tr>
<td>DenSci 3301</td>
<td>Community Dental Health Service Learning Lab</td>
<td>1</td>
</tr>
<tr>
<td>DenSci 3305</td>
<td>Dental Medicine II</td>
<td></td>
</tr>
<tr>
<td>DenSci 3336</td>
<td>Clinical Dental Hygiene III</td>
<td></td>
</tr>
<tr>
<td>DenSci 3337</td>
<td>Dental Hygiene III</td>
<td></td>
</tr>
<tr>
<td>DenSci 3346</td>
<td>Clinical Dental Hygiene IV</td>
<td></td>
</tr>
<tr>
<td>DenSci 3347</td>
<td>Dental Hygiene IV</td>
<td></td>
</tr>
</tbody>
</table>

**Dental Science Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DenSci 2800</td>
<td>Individual Research</td>
<td></td>
</tr>
<tr>
<td>DenSci 2830</td>
<td>Directed Research, Projects</td>
<td></td>
</tr>
<tr>
<td>DenSci 2920</td>
<td>Short Courses, Workshops, Institutes &amp; Special Programs</td>
<td></td>
</tr>
<tr>
<td>DenSci 3130</td>
<td>Independent Study</td>
<td></td>
</tr>
<tr>
<td>DenSci 4405</td>
<td>Dental Hygiene Clinical Teaching Practice</td>
<td></td>
</tr>
<tr>
<td>DenSci 4410</td>
<td>Dental Hygiene Needs of the Geriatric Client</td>
<td></td>
</tr>
<tr>
<td>DenSci 4530</td>
<td>Principles &amp; Application of Evidence-based Dental Hygiene Practice</td>
<td></td>
</tr>
<tr>
<td>DenSci 4780</td>
<td>Baccalaureate Thesis</td>
<td></td>
</tr>
<tr>
<td>DenSci 4800</td>
<td>Individual Research</td>
<td></td>
</tr>
<tr>
<td>DenSci 4810</td>
<td>Summer Elective Clinic</td>
<td></td>
</tr>
<tr>
<td>DenSci 4830</td>
<td>Directed Readings, Projects &amp; Research</td>
<td></td>
</tr>
<tr>
<td>DenSci 4890</td>
<td>Advanced Community or</td>
<td></td>
</tr>
<tr>
<td>DenSci 4920</td>
<td>Short Courses, Workshops, Institutes &amp; Special Programs</td>
<td></td>
</tr>
<tr>
<td>DenSci 4990</td>
<td>Seminar</td>
<td></td>
</tr>
</tbody>
</table>

**Suggested Course Sequence**

Please refer to this program in the on-line catalog (weber.edu/catalog) and/or contact the department for a suggested course sequence.

**Required Dental Science Courses**

**DenSci 2201. Concepts of Community Dental Health (1)**

This course will present the basic concepts of planning and implementing community dental health programs. These principles include epidemiology, sociological concepts of health and illness, health behavior, public attitudes and principles of dental health education.

**DenSci 2205. Head/Neck and Dental Anatomy (2)**

Identification of major anatomical landmarks of the head and neck, their innervation, blood supply and function. Also includes instruction in the histology and embryology of head and neck development and tooth morphology.
DenSci 2206. Clinical Dental Hygiene/Radiology (4)

DenSci 2207. Dental Hygiene I (3)
Theory essential to performing clinical treatment, including, but not limited to armamentarium, client-operator positioning, aseptic technique, soft tissue exam, health history, principles of instrumentation and control therapy. Must accompany DenSci 2206.

DenSci 2208. Radiology (2)
Preparatory skills for clinical radiology. Includes lecture material on radiation safety and exposure techniques. Must accompany DenSci 2206.

DenSci 2211. Oral Pathology (3)
The study of manifestations of disease processes in the oral cavity.

DenSci 2215. Periodontology (2)
The study of basic periodontal structures and disease processes.

DenSci 2216. Clinical Dental Hygiene II (3)

DenSci 2217. Dental Hygiene II (3)

DenSci 2219. Dental Materials (1)
Identification and experiences with materials used in dental office procedures.

DenSci 2223. Dental Medicine I (2)
The study of common medical problems of dental patients and their treatment.

DenSci DV2250. Professional Ethics (1)
Professional Ethics is designed to provide dental hygiene students with a foundation in the professional standards governing the dental hygiene profession and the development of ethical decision-making skills, in the context of diversity and respect for others. Throughout the course the student will be guided to explore issues of diversity, prejudices they may have, and their responsibility to provide culturally sensitive care.

DenSci 3301. Community Dental Health Service Learning Lab (1)
This course leads the student through off-campus field projects with selected community agencies.

DenSci 3305. Dental Medicine II (3)
The study of local anesthesia with regard to pharmacology, administration techniques, methods of pain and apprehension control and nitrous oxide sedation. Includes laboratory experiences in the administration of local anesthesia and nitrous oxide sedation. Prerequisite: DenSci 2235.

DenSci 3336. Clinical Dental Hygiene III (4)
Clinical application of DenSci 3337. This course must accompany DenSci 3337. Three four-hour clinics each week. Prerequisite: DenSci 2206 and DenSci 2216.

DenSci 3337. Dental Hygiene III (3)

DenSci 3346. Clinical Dental Hygiene IV (4)
Clinical lab which must accompany DenSci 3347. One eight hour clinic and one four hour clinic each week. Prerequisite: DenSci 2206, 2216, 3336.

DenSci 3347. Dental Hygiene IV (2)

Elective Courses

DenSci SI2230. Oral Health Research & Statistics (2)
This course is designed to provide the student with research design and statistics principles as they apply to oral health settings and issues. Prerequisite: WSU Math Competency.

DenSci 2800. Individual Research (1-3)
Special project in a student's area of interest.

DenSci 2830. Directed Readings, Projects and Research (1-3)
Limited to dental hygiene majors. A maximum of nine hours may be accumulated with this course.

DenSci 2920. Short Courses, Workshops, Institutes and Special Programs (1-3)
Consult the semester class schedule for the current offering under this number. The specific title and credit authorized will appear on the student transcript.

DenSci 3130. Independent Study (1-3)
Independent project in an area of interest; second year dental hygiene students only. Project approval by dental hygiene faculty.

DenSci 4010. Interdisciplinary Health Care Teams (3)
This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting. Cross-listed with HthSci and Nursng.

DenSci 4405. Dental Hygiene Clinical Teaching Practice (4)
Supervised teaching in the Weber State Dental Hygiene program. Prerequisite: Consent of the instructor and acceptance into the BS/DH major program.

DenSci 4410. Dental Hygiene Needs of the Geriatric Client (2)
An overview of dental health needs of elderly clients. Prerequisite: Consent of instructor and acceptance into the BS/DH major program.

DenSci 4530. Principles and Application of Evidence-based Dental Hygiene Practice (2)
Emphasis is on the critical appraisal of scientific literature, the development of clinical problem statements and hypotheses and the formulation of a research proposal. Ethical issues inherent in the research process and the identification of appropriate hypothesis testing procedures will also be discussed. Prerequisites: Acceptance into the BS/DH program and completion of WSU Quantitative Literacy requirement.

DenSci SI4780. Baccalaureate Thesis (3)
Supervised teaching in the Weber State Dental Hygiene program. Project approval by dental hygiene faculty.

DenSci 4405. Dental Hygiene Clinical Teaching Practice (4)
Supervised teaching in the Weber State Dental Hygiene program. Prerequisite: Consent of the instructor and acceptance into the BS/DH major program.

DenSci 4410. Dental Hygiene Needs of the Geriatric Client (2)
An overview of dental health needs of elderly clients. Prerequisite: Consent of instructor and acceptance into the BS/DH major program.

DenSci 4530. Principles and Application of Evidence-based Dental Hygiene Practice (2)
Emphasis is on the critical appraisal of scientific literature, the development of clinical problem statements and hypotheses and the formulation of a research proposal. Ethical issues inherent in the research process and the identification of appropriate hypothesis testing procedures will also be discussed. Prerequisites: Acceptance into the BS/DH program and completion of WSU Quantitative Literacy requirement.
requirement and three (3) credit hours of course work meeting the
scientific inquiry BS requirement. The student must also be
currently involved in the practice of dental hygiene.

DenSci 4800. Individual Research (1-3)
Special project in a student’s area of interest.

DenSci 4810. Summer Elective Clinic (4)
Summer intensive clinical course which allows the student to set
demands of the paramedic

DenSci 4830. Directed Readings,
Projects and Research (1-3)
Limited to dental hygiene majors. A maximum of nine hours may
be accumulated with this course.

DenSci 4890. Advanced Community
or Clinical Work Experience (2)
This course is designed to specifically meet the interests and career
goals of the student. The student must be licensed to practice
dental hygiene at the site in which the work experience will take
place or have successfully completed an accredited dental hygiene
program. Prerequisite: Acceptance into the BS/DH Program and
consent of the instructor.

DenSci 4920. Short Courses, Workshops,
Institutes and Special Programs (1-4)
Consult the semester class schedule for the current offering under
this number. The specific title and credit authorized will appear on
the student transcript.

DenSci 4990. Seminar (1-2)
Current concepts in dental hygiene for baccalaureate level dental
hygiene students.

DEPARTMENT

EMERGENCY CARE AND RESCUE
(EMT AND PARAMEDIC)

Department Chair: Jeffrey Grunow, RN, MSN
Location: Marriott Allied Health Building, Rm 409
Telephone Contact: Kay Van Kampen 801-626-6521
Assistant Professor: Jeff Grunow, MSN, NREMT-P;
Instructors: Cynthia L. Belnap, RN, BS; Richard Bingham, RN, BS;
Dave Fluckiger, BS, EMT-P
Medical Advisor: Jon Apfelbaum, M.D.

A paramedic is a person who
renders advanced life support to persons at the site of an illness or
injury or en route to a hospital facility. They function under the
direct supervision of an Emergency Room Physician or Registered
Nurse and are certified for such functioning by the Utah State
Department of Health.

The two-year applied science degree program in Emergency Care
and Rescue (Paramedic) is based on a curriculum designed to
provide an academic background in science, health related fields,
and communication. The prerequisites provide the general
requirements and foundation that prepares the student to meet the
demands of the paramedic classes. Satisfactory completion of the
prerequisite requirements are required prior to the paramedic
application process and include: (1) a "C" or better in Health Science
courses or equivalent classes and Medical Terminology; (2) an
overall GPA of 2.7 or above; (3) one year experience as an EMT-
Basic within the last three years or equivalent.

This program may require more than two years for completion
depending upon the timing it takes for an individual to obtain their
work experience.

Weber State contracts with authorized agencies to train their
employees for paramedic certification. Students who successfully
complete contracted programs receive a certificate of completion.

EMERGENCY CARE AND RESCUE (PARAMEDIC)

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)

Program Prerequisite: Acceptance to the program. See the
Admission Requirements listed below.

Grade Requirements: Demonstrate ability to achieve scholastically.

Credit Hour Requirements: A total of 60-63 credit hours is
required for graduation – 38 of these are required within the
program. Three upper division credit hours (courses numbered
3000 and above) are required within the program.

Advisement
Emergency Care and Rescue students are encouraged to meet
with a faculty advisor at least annually for course and program
review. Call 801-626-6521 for more information or to schedule an
appointment.

Admission Requirements
Students are eligible to apply for admission to the Emergency
Care and Rescue (Paramedic) program upon completion of the
following:
1. Make application to Weber State University
2. Satisfactory completion of the prerequisite requirements
3. Completion of the Paramedic program application form by
designated date:
   a. Successful completion of the program EMT-B written
   assessment exam with a minimum score of 70%
   b. Payment of the $20 application fee
4. Current EMT-Basic Utah certification with verification of
experience

General Education
Refer to pages 36-41 for Associate of Applied Science Degree
requirements. The following courses required for this program will
also fulfill general education requirements: Biomedical core courses
(see below), CommHU1050, Psych SS1010 and Sociology SS/DV1020.

Course Requirements for A.A.S. Degree

Prerequisite and Paramedic
Courses Required (54 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramd 1000 - 1021</td>
<td>must be satisfied as prerequisites for the Paramedic courses numbered 2000 and above.</td>
<td></td>
</tr>
</tbody>
</table>

| Paramd 1000          | EMT Basic                                  | 2       |
| Paramd 1001          | EMT Basic Lab                              | 4       |
| Paramd 1010*         | EMT Intermediate Intro                     | 2       |
| Paramd 1011*         | EMT Intermediate Lab                       | 2       |
| Paramd 1020*         | EMT Intermediate Lab                       | 2       |
| Paramd 1021*         | EMT Intermediate Lab                       | 2       |
| Paramd 2000          | Intro to Paramedic Practice                | 4       |
| Paramd 2010          | Medical Emergencies                        | 5       |
| Paramd 2020          | Traumatic Emergencies                      | 5       |
| Paramd 2030          | Special Considerations in Paramedic Practice | 4     |
| Paramd 2040          | Paramedic Clinical I                       | 4       |
| Paramd 2100          | Advanced Paramedic Practice                | 6       |
| Paramd 2110          | Paramedic Clinical II                      | 3       |
| Paramd 2120          | Paramedic Internship                       | 9       |
The following are to be taken in addition to the courses required

**Required Courses**
- HthSci LS1110 Health Sciences (Biomedical Core) (4)
- HthSci 1111 Health Sciences (lab) (4)

Acceptable Equivalent to Biomedical core courses
- Zool 2100 Human Anatomy (4)
- Zool 2220 Human Physiology (4)
or HthSci 1115 Biomedical Principles for Certificate (4)
- HthSci 1101 Medical Terminology (2)

**Support Courses Required (15 credit hours)**
- Engl EN1010 Introduction to Writing (3)
- HthSci 1101 Medical Terminology (2)
- One year working experience as EMT (working with paramedics)

**Specific Requirements:**
- *These two classes can be taken through independent study.
- Engl EN1010, and Math 0960 or 1010.
- HthSci LS1110 Health Sciences (Biomedical Core) (4)
- HthSci 1111 Health Sciences (lab) (4)

**Support Courses Required (15 credit hours)**
- Comm HU1050 Intro to Interpersonal Communication (3)
- Health 3400 Substance Abuse Prevention (3)
- HthSci 2230 Intro Pathophysiology (3)
- Psych SS1010 Intro Psychology (3)
- Socgy SSV1020 Social Problems (3)

*One year experience as an EMT-Basic is required within the last three years or Paramd 1010/1011 (2), Paramd 1001/1002 (2), and Paramd 1021 (2). Please call the program for additional details on this requirement.

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**Emergency Care and Rescue**

**Certificate of Completion**

Applications for a certificate of completion are open to all students prepared with the following prerequisites:

**Specific Requirements:**
- *One year working experience as EMT (working with paramedics)* within the last three years or equivalent, or Paramd 1010/1011 (4), Emergency Medical Technician Intermediate Intro, and Paramd 1020/1021 (4). Emergency Medical Technician Intermediate
- HthSci 1101 Medical Terminology * (2)
- *HthSci 1115 Biomedical Principles for Certificate of Completion for Paramedics* * (4) or HthSci 1110/1111 * (8) or Zool 2100/2200 * (8)
- Engl EN1010 Introduction to Writing * (3)
- Math ND0960 First Course in Algebra * (3) or equivalent

*These two classes can be taken through independent study. Call 801-626-6785.

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**Emergency Medical Technician**

**EMT Basic and Intermediate Certification**

**Basic**

Basic life support, patient assessment and treatment modalities comprise this Basic curriculum. Department of Transportation (DOT) and Utah State Department of Health standards for certification are met.

**Required Course (no prerequisites are required)**
- Paramd 1000 EMT Basic (2)
- Paramd 1001 EMT Basic Lab (4)

**Intermediate**

Utah State Department of Health and Department of Transportation Standards for intermediate certification are utilized to provide advanced life support to the sick and injured.

**Required Courses**

The following are to be taken in addition to the courses required for Basic certification.
- Paramd 1010 EMT Intermediate Intro (2)
- Paramd 1011 EMT Intermediate Intro Lab (2)
- Paramd 1020 EMT Intermediate (2)
- Paramd 1021 EMT Intermediate Lab (2)

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**Emergency Care (Paramedic) Courses - Paramd**

**Paramd 1000. Emergency Medical Technician - Basic (2)**

This course teaches the student to recognize and instruct the response to emergency calls to provide efficient and immediate care to the critically ill and injured, and deliver transport needs for the patient to the appropriate medical facility. The student will be able to determine the nature and extent of illness or injury and establish priority for required emergency medical care. Theory will include the emergency medical care to the adult, infant and child, medical, and trauma patients. There are 46 lessons in the core curriculum.

**Paramd 1001. Emergency Medical Technician - Basic Lab (4)**

At the completion of this course the student will be able to demonstrate competency managing emergencies, utilizing all Basic Support equipment and skills in accordance with all behavioral objectives in the current USDOT/EMT Basic curriculum. In addition to the lab, this course requires that the student have patient interactions in a clinical setting. Based on assessment finding, renders emergency medical care to the adult, infant and child, medical, and trauma patients.

**Paramd 1005. EMT-Basic Field Experience - I (3)**

Minimum 120 hours of supervised EMT-Basic patient care experience provided through day shifts on the ambulance and/or pre-hospital setting. A preceptor evaluates basic life support knowledge, skills and affective abilities. Prerequisites: Paramd 1000/1001 and HthSci 1101, 1110/1111 or 1115 and 70% minimum on EMT-B assessment exam. Department permission required.

**Paramd 1006. EMT-Basic Field Experience - II (3)**

Minimum 120 hours of supervised EMT-Basic patient care experience provided through assigned shifts on the ambulance and/or pre-hospital setting. A preceptor evaluates basic life support knowledge, skills and affective abilities. Prerequisites: Paramd 1005, Engl EN1010, and Math 0960 or 1010.

**Paramd 1010. Emergency Medical Technician - Intermediate Introduction (2)**

Introduction of Intermediate EMT concepts of basic and advanced life support utilizing cognitive knowledge objects using the State Department of Health and current National Standard EMT-I Curriculum. Application of pre-hospital care will be demonstrated through written assignments and exams. Course may be challenged for credit. Course is required, or equivalent work experience, before admission into the paramedic program. Prerequisite: Must have Basic EMT certification.

**Paramd 1011. Emergency Medical Technician - Intermediate Introduction Lab (2)**

This course requires clinical hours with an emergency facility and ambulance as scheduled. Application of basic EMT skills involving pre-hospital care with staged and real emergencies and demonstration of psychomotor skills through laboratory, ambulance riding time, and clinical assignments. Clinical activities are adapted to previous documented work experiences. This course may be challenged for credit. This course is required, or equivalent work experience, before admission into the paramedic program. Prerequisites: Must have Basic EMT certification.

* Paramd 1010 combined with Paramd 1011 will provide a certificate of 60 hours of continuing medical education hours toward recertification requirements for the Utah State Department of Health.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramd 1020</td>
<td>Emergency Medical Technician - Intermediate (2)</td>
<td></td>
<td>Curriculum includes but is not limited to the US Department of Transportation National Standard Curriculum for the EMT-Intermediate. This course consists of the cognitive knowledge and theory components of the USDOT Curriculum and builds upon the EMT Basic knowledge. State certification eligibility of EMT Intermediate for successful completion of both Paramd 1020 and Paramd 1021. Students will demonstrate mastery of cognitive knowledge skills through written assignments and examinations. Course format consists of didactic lecture. Paramedic Program application, faculty review, and committee selection are required to be admitted to this course. Prerequisite: Paramd 1011 or equivalent.</td>
</tr>
<tr>
<td>Paramd 1021</td>
<td>Emergency Medical Technician - Intermediate Lab (2)</td>
<td></td>
<td>Curriculum includes but is not limited to the U.S. Department of Transportation National Standard Curriculum for the EMT-Intermediate. Builds upon the EMT Basic psychomotor skills. State certification eligibility of EMT Intermediate for successful completion of both Paramd 1020 and Paramd 1021. This course consists of clinical instruction and supervised field experiences in an advanced life support rescue unit which functions under a medical command authority. Students will demonstrate mastery of the educational psychomotor skills through practical exams and staged and real emergencies. Must have department approval by application process involving an admissions committee final selection. Prerequisite: Paramd 1020 or equivalent.</td>
</tr>
<tr>
<td>Paramd 1030</td>
<td>Pediatric Advanced Life Support (PALS) (1)</td>
<td></td>
<td>Subject and case based approach to American Heart Association protocols and skills required for successful resuscitation of child and infant. The cognitive and psychomotor skills needed to resuscitate and stabilize infants and children in respiratory failure, shock, or cardiopulmonary arrest. Prerequisite: Basic Life Support course completion card.</td>
</tr>
<tr>
<td>Paramd 1031</td>
<td>Advanced Cardiac Life Support (ACLS) (1)</td>
<td></td>
<td>Subject and case based approach to American Heart Association protocols and skills required for successful resuscitation of the adult. This course is designed to help all participants succeed in acquiring the cognitive knowledge psychomotor skills needed by medical professionals in adult resuscitation attempts.</td>
</tr>
<tr>
<td>Paramd 2000</td>
<td>Introduction to Paramedic Practice (4) F. S</td>
<td>4</td>
<td>Introduces the paramedic student to basic patient interaction and assessment skills. Includes professional considerations for the individual practitioner and patient. Must complete department application process and be accepted to program prior to registration. Paramd 1006 may be used as a prerequisite for Paramd 2000.</td>
</tr>
<tr>
<td>Paramd 2010</td>
<td>Medical Emergencies (5) F. S</td>
<td>5</td>
<td>Prepares the student to recognize medical emergencies, the appropriate patient care modalities, and functions of the paramedic in practice. Prerequisites: Paramd 2000.</td>
</tr>
<tr>
<td>Paramd 2020</td>
<td>Traumatic Emergencies (5) F. S</td>
<td>5</td>
<td>Prepares the student to recognize traumatic emergencies, the appropriate patient care modalities, and functions of the paramedic in practice. Prerequisites: Paramd 2000.</td>
</tr>
<tr>
<td>Paramd 2030</td>
<td>Special Considerations in Paramedic Practice (4) F. S</td>
<td>4</td>
<td>Course provides understanding of the essentials related to special challenges to paramedic practice such as neonatology, pediatrics, obstetrics, geriatrics, and acute interventions for the chronic care patient. Operations with medical incident command, rescue awareness, hazardous materials incidents, and crime scene awareness are included. Prerequisites: Paramd 2000.</td>
</tr>
</tbody>
</table>

**Department of Health Sciences**

**Course Code**: HthSci 1001. A Case Study Approach to the Health Sciences (2)

A Case Study Approach to the Health Sciences is a WSU Online course designed for students wishing to explore health professional career paths using case study models. Each case study focuses on a disease process. Progression through each case study involves a review of anatomy and physiology, pathophysiology, medical terminology, and a study of health professionals including their educational and training requirements. Additionally, the student will explore key medical diagnostic tests (e.g., laboratory, imaging) used in patient disease diagnosis, management, and prevention. The course emphasizes the importance of the team approach to patient care. Cross-listed with HthSci 1001.

**Course Code**: HthSci 1101. Medical Terminology (2) F. S

Medical terms of Greek and Latin origin. Designed for the pre-professional and workers in health related fields.

**Course Code**: HthSci 1105. Technology Enhanced Anatomy & Physiology (4 F)

This course teaches fundamentals of human anatomy and physiology that are required for further studies in nursing, allied health, and related disciplines. It is designed to be offered in a
HthSci 1106. Technology Enhanced Anatomy & Physiology (continued) (4) S
Prerequisite: HthSci 1105. Four hours of Ednet and two hours of laboratory/recitation per week.

HthSci 1111. Biomedical Core Lecture/Lab (continued) (4) Su. F. S
Prerequisite: HthSci 1110. Three lecture demonstrations per week. Two lab hours per week.

HthSci 1130. Common Medicines (3) F. S
This is an introductory course and will provide information regarding proper drug usage for persons without significant backgrounds in the Biological Sciences. The course primarily discusses over-the-counter medicines as well as prescription drug groups which are commonly used by the public. The overall objective will be to provide information in such a way that individuals are more aware of possible drug-related problems, able to make wise and appropriate choices, and become well-informed consumers.

HthSci 2230. Introductory Pathophysiology (3) Su. F. S
An introduction to the nature of disease and its effects on body systems. Prerequisite: Completion of anatomy and physiology courses with a grade of "C" or better.

HthSci 3328. Pathophysiology of Cells and Tissues (2) F. S
Biological interactions among cellular injuries, genetic disorders, neoplasia, and inflammatory and immune disorders. A 7.5 week course that can be taken in conjunction with HthSci 3329. (It may be taken without 3329.) Prerequisite: HthSci LS1110 with a grade of "C" or better.

HthSci 3329. Pathophysiology of Organs and Systems (2) F. S
Interpretation of disease pathogenesis and pathological symptoms. A 7.5 week course that can be taken in conjunction with HthSci 3328. (It may be taken without 3328.) Prerequisite: HthSci LS1111 with a grade of "C" or better.

HthSci 4010. Interdisciplinary Health Care Teams (3)
This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting.

DEPARTMENT

HEALTH ADMINISTRATIVE SERVICES

Department Chair: Kenneth L. Johnson, Ph.D.
Location: Marriott Allied Health Building, Room 203
Telephone Contact: Sarah Rivkind 801-626-7242
Associate Professors: Kenneth Johnson, Patricia Shaw
Assistant Professors: Lloyd Burton, Richard Dahlkemper
Adjunct Faculty: Claudia Havens, RHIA; Pauline Isaacson, RHIA, CPHQ; Cory Moss, MBA; Tim Ohrenberger; Richard Sine, Ph.D.; Kelly Snowball; Catherine Volt, MBA, RHIA

The Health Administrative Services Program (HAS) provides an opportunity for health practitioners, students in the health disciplines, and others to prepare themselves for healthcare management, healthcare information, and health promotion roles in both traditional and nontraditional health care settings. In addition, many students use the program to prepare themselves for graduate study in health administration and other related disciplines. The program is uniquely structured to help practicing health professionals build upon their two year professional degree or credential while at the same time accommodating the more traditional four-year student. The curriculum is organized so that students may tailor their studies in any one of five emphases: Health Services Administration, Health Information Management (HIM), Health Promotion, Long-Term Care Administration, and Health Information Technology. All study emphases lead to a Bachelors Degree except for Health Information Technology, which offers an Associate of Applied Science degree. The HAS program was developed to better prepare health practitioners and others to take advantage of the challenges and opportunities facing them as members of the nation's health care team.

Study Emphases

- **Health Services Administration:** Designed to provide health care practitioners and others with the skills and competencies to function as supervisors and managers in health care settings. In the changing health care environment, new and challenging demands are placed on health care personnel to expand their conventional roles to include increased administrative responsibilities. The HAS curriculum provides a working foundation in management and interpersonal skills, while at the same time introducing the student to the health care delivery system and its many and varied issues and challenges. Graduates are not only better prepared to assume increased management responsibilities, but to do so with a better understanding of the complex system in which they work.

- **Health Promotion:** The major purpose of the health promotion program is to professionally prepare students for employment in programs that promote health and prevent disease. Coursework emphasizes the development of skills required of the entry-level health educator: assessing needs, planning effective programs, implementing programs, evaluating effectiveness of programs, coordinating services, acting as a resource person, and communicating needs and concerns. Successful program completion may lead to employment in the community (health agencies, public health departments, community action projects), health care system (hospitals, clinics, student health clinics, long-term care, rehabilitation) or in the work place (business, industry, consulting).

- **Health Information Management:** This profession focuses on health care data and the management of health care information resources. The profession addresses the nature and structure of health data and the translation of that data into usable forms of information which support the health care of individuals and...
Students passing this national examination may use the professional designation of Registered Health Information Technician. The program is accredited by the American Health Information Management Association in conjunction with the Commission on Accreditation of Allied Health Education Programs, making students eligible to write the national credentialing exam of the AHIMA, the Registered Health Information Administrator.

- **Long-Term Care Administration**: Prepares students to function as administrators in nursing homes and other long-term care facilities. The curriculum is designed to provide students with a foundation in management principles and human relations, to introduce them to the long term care field, and give them operational experience in nursing home management. To function as an administrator in long-term care, one must be licensed. For licensure, most states require the completion of a bachelors degree in health administration or a related area, an extensive administrative internship, and the successful passing of an examination offered by the National Board of Examiners for Nursing Home Administrators.

- **Health Information Technology**: Health information technicians perform the essential functions of maintaining health data and records in acute, long term, and ambulatory health care settings. Opportunities also exist in related health care settings, e.g., insurance companies, medical clinics, computer software vendors, and health maintenance organizations. These functions include, but are not limited to: the coding of diseases and operations; maintaining statistics; transcribing medical reports; performing DRG and utilization review procedures; and supervising employees. The program is accredited by the Commission on Accreditation of Allied Health Education Programs in cooperation with the American Health Information Management Association. Successful completion of the Health Information Technology two-year program leads to an Associate of Applied Science degree and the completion of the Health Information Technology two-year program.

The program fosters the acquisition of leadership abilities and systems thinking necessary for adapting careers within a changing health care environment. The HIM emphasis is accredited by the American Health Information Management Association in conjunction with the Commission on Accreditation of Allied Health Education Programs, making students eligible to write the national credentialing exam of the AHIMA, the Registered Health Information Administrator.

### BACHELOR DEGREE (B.S.)

**Advisement**

Students are encouraged to meet with a faculty advisor annually for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment.

**Admission Requirements**

Declare your program of study (see page 18). In addition, the following steps are required:

1. Schedule an appointment for academic advisement with a member of the Department of Health Administration faculty.
2. Make application to the program and the Dr. Ezekiel R. Dumke College of Health Professions.

Overall GPA of 2.5 is required.

**General Education**

Refer to pages 36-41 for Bachelor of Science requirements. Some of the courses required by this program may also fulfill general education and scientific inquiry requirements. Check with a department advisor if you have questions.

**Course Requirements for B.S. Degree**

### Health Services Administration Emphasis

#### Prerequisite Courses Required

The following prerequisite courses must be completed prior to enrollment in required courses of the program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS 3000</td>
<td>The Health Care System (2)</td>
</tr>
<tr>
<td>HthSci 1101</td>
<td>Medical Terminology (2)</td>
</tr>
<tr>
<td>HthSci LS1110/1111</td>
<td>Biomedical Core (8)</td>
</tr>
<tr>
<td>or Zool LS1020</td>
<td>Human Biology (3)</td>
</tr>
<tr>
<td>Acctng 2010</td>
<td>Survey of Accounting I (3)</td>
</tr>
<tr>
<td>Econ SS2010</td>
<td>Principles of Micro-Economics (3)</td>
</tr>
<tr>
<td>Engl EN2100 and Engl EN2100 Writing (6)</td>
<td></td>
</tr>
<tr>
<td>Quantitative Literacy (see General Education Core Requirements)</td>
<td></td>
</tr>
<tr>
<td>Computer &amp; Information Literacy (see General Education Core Requirements)</td>
<td></td>
</tr>
</tbody>
</table>

#### Required Courses (39-43 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS 3020</td>
<td>Health Care Marketing (3)</td>
</tr>
<tr>
<td>HAS 3150</td>
<td>Community Health Care Delivery Systems (3)</td>
</tr>
<tr>
<td>HAS 3230</td>
<td>Health Communication (3)</td>
</tr>
<tr>
<td>HAS 3240</td>
<td>Human Resource Development in Health Care (3)</td>
</tr>
<tr>
<td>HAS 3260</td>
<td>Health Care Administrative &amp; Supervisory Theory (3)</td>
</tr>
<tr>
<td>HAS 3750</td>
<td>Health Care Financial Administration (3)</td>
</tr>
<tr>
<td>HAS 4320</td>
<td>Health Care Economics and Policy (3)</td>
</tr>
<tr>
<td>HAS 4400</td>
<td>Legal and Ethical Aspects of Health Administration (3)</td>
</tr>
<tr>
<td>HAS 4740</td>
<td>Senior Seminar (1)</td>
</tr>
<tr>
<td>HAS 4860</td>
<td>Practicum/Internship (2-6)</td>
</tr>
<tr>
<td>or HIM 4990</td>
<td>Baccalaureate Thesis &amp; Presentation (3)</td>
</tr>
<tr>
<td>HIM 2330</td>
<td>Classification Systems Topics &amp; Reimbursement Issues (2)</td>
</tr>
<tr>
<td>HIM 3010</td>
<td>Info Technologies in Healthcare Management (2)</td>
</tr>
<tr>
<td>HIM SJ2200</td>
<td>Epidemiology &amp; Biostatistics (3)</td>
</tr>
<tr>
<td>HIM 3300</td>
<td>Intro to Quality Improvement in Health Care (2)</td>
</tr>
<tr>
<td>HthSci 2230</td>
<td>Introductory Pathophysiology (3)</td>
</tr>
</tbody>
</table>

### Elective Courses (4 credit hours required)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS 3190</td>
<td>Patient Education (3)</td>
</tr>
<tr>
<td>HAS 4410</td>
<td>Clinical Instructional Design &amp; Evaluation (3)</td>
</tr>
</tbody>
</table>
• Health Promotion Emphasis

Health courses are described in the Jerry and Vickie Moyes College of Education.

Prerequisite Course Required (3 credit hours)

Health SS1030* Healthy Lifestyles (3)

Required Life Science Support Course (3-4 Hours)

HthSci LS1110 Biomedical Core Lecture/Lab (4)

or Zool LS1020 Human Biology (3)

Courses Required (40 credit hours)

Health 2700 Consumer Health (3)
Health 3000 Foundations of Health Promotion (3)
Health 3200 Methods Health Education (3)
Health 4103 Health Promotion Research & Assessment (3)
Health 4150 Planning & Evaluating Health Promotion Programs (4)
Health 4860 Field Experience (6)
Health 4990 Senior Seminar (1)
Health 3150 Community & Worksite HPP (3)
or HAS 3150 Community Health Care Delivery Systems (3)
HAS 3000 The Health Care System (2)
HAS 3190 Patient Education (3)
HAS 3230 Health Communication (3)
HAS 3260 Health Care Administration & Supervisory Theory (3)
HIM 3200 Epidemiology & Biostatistics (3)
Elective Courses (12 Hours)

Health 1110 Stress Management (3)
Health 1300 First Aid: Responding to Emergencies (3)
Health 3400 Substance Abuse Prevention (3)
Health DV3420 Multicultural Health & Nutrition (3)
Health 3500 Human Sexuality (3)
Health 4220 Women's Health Issues (3)
Health 4250 Contemporary Health Issues of Adolescents (2)
Health 4420 Health/Nutrition Older Adult (3)
Health 4800 Individual Projects (1-3)
Health 4920 Workshops (1)
HthSci/LS1020 Foundations in Nutrition (3)
HAS 3020 Health Care Marketing (3)
HAS 3240 Human Resource Development in Health Care (3)
HAS 4320 Health Care Economics and Policy (3)
HAS 4400 Legal and Ethical Aspects of Health Administration (3)
HAS 4410* Clinical Instructional Design and Evaluation (3)
HAS 4420 Clinical Instructional Skills (3)
HthSci 2230 Introductory Pathophysiology (3)
PE 2300 Health/Fitness Evaluation and Exercise Prescription (3)

*HAS 4410 may be substituted for Health 3200.

• Health Information Management Emphasis

Prerequisite Previous completion of Health Information Technology program or equivalent curriculum.

Courses Required (28-33 credit hours)

HIM 3000 Computer Applications in Health Care (3)
HIM 3050 Health Information Structures (3)
HIM 3200 Epidemiology & Biostatistics (3)
HIM 3500 Biomedical Research Support (2)
HIM 4100 Health Info Services Management (3)
HAS 3020 Health Care Marketing (3)
HAS 3230 Health Communication (3)
HAS 3240 Human Resource Development in Health Care (3)
HAS 3750 Health Care Financial Administration (3)
HAS 4860 Practicum/Internship (2-6)
or HIM 4990 Baccalaureate Thesis & Presentation (3)

Support Courses Required (15 credit hours)
The support course requirements are changing. Contact the Health Administrative Services Department for an updated listing.

• Long-Term Care Administration Emphasis

Prerequisite Courses Required

The following prerequisite courses must be completed prior to enrollment in required courses of the LTC program.

HAS 3000 The Health Care System (2)
HthSci LS1110/1111 Biomedical Core (8)
or Zool LS1020 Human Biology (3)
Actng 2010 Survey of Accounting I (3)
Econ SS2010 Principles of Micro-Economics (3)
Engl EN2010 and Engl EN2010 Writing (6)
Quantitative Literacy (see General Education Core Requirements)
Computer & Information Literacy (see General Education Core Requirements)

Core Courses Required (42-46 credit hours)

HAS 3020 Community Health Care Delivery Systems (3)
HAS 3230 Health Communication (3)
HAS 3240 Human Resource Development in Health Care (3)
HAS 3260 Health Care Administrative & Supervisory Theory (3)
HAS 3750 Health Care Financial Administration (3)
HAS 4320 Health Care Economics and Policy (3)
HAS 4400 Legal and Ethical Aspects of Health Administration (3)
HAS 4520 Long-Term Care Administration (2)
HAS 4525 Health Facility Operations (1)
HAS 4740 Senior Seminar (1)
HAS 4860 Practicum/Internship (2-6)
or HIM 4990 Baccalaureate Thesis & Presentation (3)
HIM 3200 Introduction to Long-Term Care (3)
HthSci 2230 Introductory Pathophysiology (3)

Elective Courses (4 credit hours)

HAS 3190 Patient Education (3)
HAS 4410 Clinical Instructional Design & Evaluation (3)
HAS 4420 Clinical Instructional Skills (3)
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAS 4620</td>
<td></td>
</tr>
<tr>
<td>HAS 4800</td>
<td></td>
</tr>
<tr>
<td>HAS 4990</td>
<td></td>
</tr>
<tr>
<td>Geront 2220</td>
<td></td>
</tr>
<tr>
<td>Geront 3000</td>
<td></td>
</tr>
<tr>
<td>Geront 3120</td>
<td></td>
</tr>
</tbody>
</table>

### HEALTH ADMINISTRATIVE SERVICES

#### MINOR

- **Grade Requirements**: A grade of "C" or better in courses used toward the minor.
- **Credit Hour Requirements**: Between 17 and 24 credit hours depending on emphasis.

#### Course Requirements for Minor

- **Health Services Administration Emphasis**
  - **Required Courses (17 credit hours)**
    - HAS 3000: The Health Care System (2)
    - HAS 3020: Health Care Marketing (3)
    - HAS 3230: Health Communication (3)
    - HAS 3240: Human Resource Development in Health Care (3)
    - HAS 3260: Health Care Administrative & Supervisory Theory (3)
    - HAS 4400: Legal and Ethical Aspects of Health Administration (3)
  - **Elective Courses (5 credit hours required)**
    - HAS 3150: Community Health Care Delivery Systems (3)
    - HAS 3190: Patient Education (3)
    - HAS 4320: Health Care Economics and Policy (3)
    - HAS 4620: International Health & Health Care (3)
    - HAS 4740: Senior Seminar (1)
    - HAS 4800: Individual Study (1-3)
    - HAS 4990: Seminar (1)
    - HIM 3010: Info Tech in Health Care Mgmt (3)
    - HIM 3300: Intro to Quality Improvement in Health Care (2)

- **Health Promotion Emphasis**
  - **Required Courses (15 credit hours)**
    - HAS 3000: The Health Care System (2)
    - HAS 3150 or Health 3150: Community Health Care Delivery Systems (3)
      - Work Promotion Programs (3)
    - Health 3000: Foundations of Health Promotion (3)
    - Health 3200*: Methods in Health Education (3)
    - Health 4150: Planning & Evaluating Health Promotion Programs (4)
  - **Elective Courses (6 credit hours minimum)**
    - Health LS1020: Foundations in Nutrition (3)
    - Health 1110: Stress Management (3)
    - Health 1300: First Aid: Responding to Emergencies (3)
    - Health 2700: Consumer Health (3)
    - Health 3400: Substance Abuse Prevention (3)
    - Health DV3420: Multicultural Health & Nutrition (3)
    - Health 3500: Human Sexuality (3)
    - Health 4220: Women's Health Issues (3)
    - Health 4250: Contemporary Health Issues of Adolescents (2)
    - Health 4420: Health & Nutrition in the Older Adult (3)
    - Health 4800: Individual Projects (1-3)
    - Health 4860: Field Experience (2-6)
    - HAS 3020: Health Care Marketing (3)

- **Long-Term Care Administration Emphasis**
  - **Required Courses (11 credit hours)**
    - HAS 3000: The Health Care System (2)
    - HAS 3020: Health Care Marketing (3)
    - HAS 3260: Health Care Administrative & Supervisory Theory (3)
    - HAS 4520: Long-Term Care Administration (2)
    - HAS 4525: Health Facility Operations (1)
  - **Elective Courses (6 credit hours required)**
    - HAS 3150: Community Health Care Delivery Systems (3)
    - HAS 3190: Patient Education (3)
    - HAS 3230: Health Communication (3)
    - HAS 3240: Human Resource Development in Health Care (3)
    - HAS 4320: Health Care Economics and Policy (3)
    - HAS 4400: Legal and Ethical Aspects of Health Administration (3)
    - HAS 4620: International Health & Health Care (3)
    - HAS 4740: Senior Seminar (1)
    - HAS 4990: Seminar (1)
    - HIM 3010: Info Tech in Health Care Mgmt (3)
    - HIM 3300: Intro to Quality Improvement in Health Care (2)
    - Geront 2220: Intro to Social Gerontology (3)
    - Geront 3000: Death & Dying (3)
    - Geront 3120: Aging: Adaptation & Behavior (3)

### HEALTH ADMINISTRATIVE SERVICES

#### GRADUATE CERTIFICATE

This program is pending approval.

- **Program Prerequisite**: Applicants must possess a bachelor's degree from a regionally accredited institution and be accepted into the certificate program. Completion of courses in statistics, accounting and economics are required for enrollment in certificate courses. Students are expected to be competent in use and manipulation of spreadsheet, word-processing and presentation software.

- **Grade Requirements**: To receive a certification the student must complete all courses in the certificate program with a grade of "C" or higher, and maintain an overall program GPA of 2.7 or higher.

- **Credit Hour Requirements**: 15 credit hours as specified below.

#### Course Requirements for Certificate

- **Required Courses (15 credit hours)**
  - HAS 6000: Health Systems and the Healthcare Economy (3)
  - HAS 6200: Health Behavior and Managerial Epidemiology (3)
HEALTH INFORMATION TECHNOLOGY

Health Information Technicians perform the essential functions of maintaining health data and records in acute, long-term, and ambulatory health care settings. Opportunities also exist in related health care settings, e.g., insurance companies, medical clinics, computer software vendors, and health maintenance organizations. These functions include, but are not limited to, the coding of diseases and operations, maintaining statistics, transcribing medical reports, performing DRG and utilization review procedures, supervising employees.

In addition to classroom and laboratory course work, students participate in a supervised clinical experience in a hospital medical record department or other health information environment. The Health Information Technology program is accredited by the Commission on the Accreditation of Allied Health Education Programs, in cooperation with the American Health Information Management Association.

Successful completion of the Health Information Technology two-year program leads to an associate of applied science degree and the student is then eligible to sit for the national certifying examination. Students passing this national examination may use the professional designation Registered Health Information Technician.

HEALTH INFORMATION TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)

» Program Prerequisite: Be accepted to the program.

» Minor: Not required.

» Grade Requirements: A grade of "C" or better in required courses.

» Credit Hour Requirements: A minimum of 63 credit hours is required for graduation.

Advisement

Health Information Technology students should meet with a faculty advisor for course and program advisement. Call 801-626-7242 for more information or to schedule an appointment.

Admission Requirements

All students interested in the Health Information Technology Program must take HIM 2000, Introduction to the Health Information Systems & Settings, in the fall semester of the year in which they wish to enter. During that course, faculty will provide an overview of the profession and details about job duties, work environments, and professional responsibilities and opportunities. Various assignments and exercises are assigned which help to give faculty a clearer picture of each student's individual abilities. Each student completes a program application during the course. A $20 application fee must be paid at the time the application is submitted.

At mid term of HIM 2000, faculty will sum each student's points earned in the following areas: 1) GPA in required courses taken outside the department x 2; 2) index points assigned by faculty on the basis of the student's performance in HIM 2000, i.e. professionalism, communications, work experience, and diversity. The students applying for admission that year are then ranked according to their total points, and approximately the top 20 are admitted to the program for that year.

General Education

Refer to pages 36-41 for Associate of Applied Science requirements.

Course Requirements for A.A.S. Degree

HEALTH INFORMATION COURSES REQUIRED (23 credit hours)

HIM 2000 Intro to Health Information (4)
HIM 2200 Health Information Statistics (3)
HIM 2300 Basic Diagnosis and Procedural Coding (2)
HIM 2310 Advanced ICD Coding (2)
HIM 2320 Advanced Procedural Coding (2)
HIM 2330 Classification Systems Topics & Reimbursement Issues (2)
HIM 2861 (2nd Year) Professional Practice Experiences (2)
HIM 2862 (2nd Year) Professional Practice Experiences (2)
HIM 3010 Info Technology in Health Care Management (2)
HIM 3300 Intro to Quality Improvement (2)

Support Courses Required (27 credit hours)

HthSci 1101 Medical Terminology (2)
HthSci 1111 Biomedical Core (4)
HthSci 2230 Intro to Pathophysiology (3)
HAS 3000 The Health Care System (2)
HAS 3260 Health Care Administrative & Supervisory Theory (3)
HAS 4400 Legal and Ethical Aspects of Health Administration (3)
TBE TE1700 Microcomputer Applications (3)
Math QL1030 Contemporary Mathematics (3)
or HIM SI3200 Epidemiology & Biostatistics (3)

HEALTH ADMINISTRATIVE SERVICES COURSES - HAS

HAS 3000. The Health Care System (2) F. S
A study of the U.S. health care system to help students understand the critical issues facing healthcare in its ever-changing environment and to gain a sense of the complex multidimensional nature of healthcare delivery in the United States.

HAS 3020. Health Care Marketing (3) Su. F. S
This course outlines the application of marketing principles to health care organizations and the public health arena. Students will apply those principles in the development of a marketing plan.

HAS 3150. Community Health Care Delivery Systems (3) F. S
This course covers the concepts of public and community health care, its origins and historical evolution. Students will learn about and experience the management of public health programs, the prevention and epidemiology of disease, disability and dependency, as well as the inter-relationship among community/public health and the environment, human development, behavioral disorders and health care services.

HAS 3190. Patient Education (3) S
An introduction to patient education and health promotion with emphasis on program planning, implementation, intervention skills, and program evaluation in a medical care setting.

HAS 3230. Health Communication (3) F. S
A broad examination of communication theory, application, and research in health care delivery and management. Examines many different levels and channels of communication, including the development and application of interpersonal communication, computerized systems, and mass media.
small group communication and teamwork, organizational communication, communication ethics, leadership, and motivation skills in dealing with health care providers, staff, and consumers in a variety of health care environments. Cross-listed with Comm 3230.

HAS 3240. Human Resource Development in Health Care (3) S
Study of human resource principles and practices in Health Care facilities. The general topics include: job analysis and work flows, compensation, recruitment and selection, performance appraisals, discipline, legal environment, unions, safety and health.

HAS 3260. Health Care Administrative and Supervisory Theory (3) Su, F, S
Basic theories and concepts of management. Emphasis is on individual and group behavior, interpersonal skills, decision making, leadership theory, planned change, motivation, teamwork, organizational design and culture within the context of the health care organization.

HAS 3750. Health Care Financial Administration (3) S
This course is designed to build upon the concepts introduced in basic accounting courses and develop proficiency in applying administrative financial techniques in health care decision making. Prerequisites: Acctng 2010, Quantitative Literacy, HIM SI 3200.

HAS 4320. Health Care Economics and Policy (3) F
Discussion and analysis of the economic models controlling healthcare markets with subsequent investigation of the complex federal, state, and local policies and policymaking processes which result from those models in U.S. healthcare systems. Prerequisites: HAS 3750 and Econ S 2010.

HAS 4400. Legal and Ethical Aspects of Health Administration (3) F, S
Review of legal responsibilities of physicians, other healthcare workers, and healthcare institutions and means by which health-related laws and regulations are developed and implemented. Issues involved in healthcare professional ethics are discussed and evaluated. Prerequisite: HAS 3260.

HAS 4410. Clinical Instructional Design and Evaluation (3) F
Designed to provide individuals with the skills necessary for the preparation, planning and evaluation of instruction. The Philosophy, theory, and effective methods and techniques of teaching the adult learner.

HAS 4420. Clinical Instructional Skills (3) S
Designed to provide individuals with skills necessary for the implementation of instruction. Presentation practice is provided with peer evaluation and feedback.

HAS 4520. Long-Term Care Administration (2) S
Application of health administration core curriculum to specific practice issues in the long-term care setting. Setting-specific organization structures, relationships with healthcare providers, services offered, financial management issues, and regulatory issues are investigated. Prerequisite: HAS 4400.

HAS 4525. Health Facility Operations (1) S
A review of long-term care facility operations utilizing computer-based simulations. Teams of students make operational decisions utilizing financial statements, census reports, staffing schedules and other relevant factors. Prepares students for specific types of situations and questions encountered on the long-term care administrator licensing examination. Prerequisite: HAS 4520.

HAS 4620. International Health and Health Care (3) Su
This course is designed to explore health and health care systems in countries other than the United States. Emphasis will be directed toward illnesses and treatments, health promotion, environmental and economic issues, governmental infrastructures that support health, and cultural considerations. The course will be targeted to the professional interested in international health information and experiences.

HAS 4740. Senior Seminar (1) F, S
A capstone course for seniors designed to provide integration and application of theory through the use of case study analysis. Departmental approval required.

HAS 4800. Individual Study (1-3) Su, F, S
Topics in allied health education studies tailored to the particular needs and interests of the student. Class may be repeated with program approval.

HAS 4860. Practicum/Internship (2-6) Su, F, S
Provides opportunities for observation, participation and practical application of administrative and management skills in the institutional setting. Departmental approval required.

HAS 4990. Seminar (1) Su, F, S
Topics, issues, and trends in Health Care. May be repeated with program approval.

HEALTH ADMINISTRATIVE SERVICES

GRADUATE COURSES - HAS

HAS 6000. Health Systems and the Healthcare Economy (3)
In-depth analysis and synthesis of all aspects of the health care delivery system emphasizing improvement of health care delivery and access. Examines the complex organizational dynamics and structures that predicate the interaction among major components of the U.S. health care system, including service provider settings in which care is provided. The course surveys the funding systems and regulatory structures for financing healthcare delivery and resource management in health services organizations. Current reform debates will be challenged. Prerequisite: Acceptance into the certificate program.

HAS 6200. Health Behavior and Managerial Epidemiology (3)
The course addresses the integration of epidemiology into strategic planning and managerial decision-making in health services organizations. Epidemiological principles and tools of investigation from clinical and managerial perspectives are addressed. Course work includes environmental analysis of health behaviors and lifestyle that impact demand on health care delivery systems. The student will evaluate models for integration of health services, preventive programs, demand management, and policy issues affecting continuity of care. Concurrent enrollment in HAS 6000 or Instructor Approval.

HAS 6300. Quality Improvement and Risk Management in Health Services Organizations (3)
A study of the effects of sophisticated quality and health outcome measures as used by individuals, employers and insurers to compare the results of various providers. The course will cover the forces of the smarter external customers and internal pressures to justify costs, continuous quality improvement, risk management, and changes demanding creative health care marketing techniques. Course content will include JCAHO and NCQA accreditation.
HEALTH INFORMATION MANAGEMENT COURSES - HIM

HIM 2000. Introduction to Health Information Systems and Settings (4) F
Introduction to the health information profession. Job duties, functions, and the professional organization are discussed. Health care settings, numbering and filing systems and equipment, master patient indexes, health information documentation requirements, discharge analysis and incomplete chart control are presented. Introduction to the process, terminology, and stylistic conventions of medical report transcription.

HIM 2200. Health Information Statistics (3) S
Discussion of the health information statistical systems that are commonly maintained in medical record departments: vital statistics, census systems, discharge systems, commonly computed rates and percentages, uniform hospital discharge data set, and computer applications. Prerequisite: TBE TE1700.

HIM 2300. Basic Diagnosis & Procedural Coding (2) F
ICD-9-CM and CPT classification, conventions and coding procedures are introduced and practiced. Prerequisite: HthSci LS1110.

HIM 2310. Advanced ICD Coding (2)
ICD-9-CM advanced coding issues and abstracting medical information from health documentation for coding is presented, discussed and practiced. Prerequisite: HIM 2300.

HIM 2320. Advanced Procedural Coding (2)
CPT advanced coding issues and abstracting medical information from health documentation for coding physician and professional billing is presented, discussed and practiced.

HIM 2330. Classification Systems Topics and Reimbursement Issues (2)
Discussion of issues parallel to or founded in the use of classification systems: Federal reimbursement systems, coding compliance, quality auditing, peer review organizations, and database reporting.

HIM 2861. (Second Year) Professional Practice Experiences (2) F
Student's final experience in the health care setting. Skills and learning from the classroom and laboratory are reinforced and practiced. The student observes in other health care settings. Projects assigned give the student expertise in technical functions, e.g., ICD-9-CM, CPT, and other coding systems. Prerequisite: HIM 2000.

HIM 2862. (Second Year) Professional Practice Experiences (2) S
Student's final experience in the health care setting. Skills and learning from the classroom and laboratory are reinforced and practiced. The student observes in other health care settings. Projects assigned give the student expertise in technical functions, e.g., ICD-9-CM, CPT, and other coding systems. Prerequisite: HIM 2861.

HIM 3000. Computer Applications in Health Care (3) F
A survey of the clinical, research, and administrative applications of computers in the health care industry from which health care information is currently derived. The role of technology and the data collected in accomplishing the objectives and procedures of the principle functional areas in health care organizations is emphasized as are the interrelationships of the organizational units with respect to data acquisition, storage, analysis, retrieval, and use.

HIM 3100. Information Technology in Healthcare Management (2) S
An overview of information technology issues and management for healthcare managers. Healthcare computer applications, infrastructure planning. IS organizational structure, IT procurement, systems analysis, and evaluation are presented and discussed.

HIM 3050. Health Information Structures (3) S
In-depth study of the structures of health care information, i.e., clinical information structures such as clinical data sets and severity of illness indices, health record structures in computer-driven formats, administrative structures for purposes of case-mix analysis, clinical correlation, and analysis of utilization patterns, financial structures necessary to the business management of health care organizations, and disease/operations classification systems structures necessary to reimbursement and epidemiological data collection and analysis. Prerequisite: HIM 3000.

HAS 6400. Strategic Health Planning and Creative Leadership (3)
The course content emphasizes visionary leadership and the principles and processes of comprehensive health planning and analysis. Leadership of diverse healthcare professionals in complex organizational structures is addressed. Various planning approaches, styles and theories are considered from a corporate decision-making perspective within the unique governance structures of health service organizations. Issues covered include planning and resource allocation within integrated health systems. Environmental analysis explores national health care delivery policy, unique financing structures such as third party payment systems, and open vs. regulated markets. Prerequisites: HAS 6000 or Instructor Approval.

HAS 6500. Health Administrative Services Capstone
A capstone course designed to integrate the knowledge gained in other graduate courses into an applied management project. The project will have enterprise-wide applicability to a health services organization. The student will develop and present a deliverable product that can be implemented by management to improve their organizational performance, specifically with analysis and recommendations for policy and strategic improvements. Prerequisites: HAS 6000, HAS 6200, HAS 6300, HAS 6400.
student also learns what techniques and resources facilitate biomedical literature searches and how to assist a researcher in the pursuit of published information. An overview of the development, structure, and management of a health care institutional medical library is presented.

**HIM 4100. Health Information Services Management (3) S** Management issues of health information services departments are discussed and worked through with reference to planning information services, organizing work force, procedures, and resources, staffing work units with qualified personnel, influencing information services teams performance, controlling and evaluating information services performance and products, and resolving organizational conflict involving information issues. Background is developed to facilitate evaluation of a vendor's system's ability to meet health care information applications, objectives and procedural requirements. "Entrepreneurial" skill is developed to lead organizations in finding solutions to their information management problems. Prerequisite: HIM 3050 and 3260.

**HIM 4990. Baccalaureate Thesis and Presentation (3) F** Senior health information management students complete a research project and thesis in partial fulfillment of program requirements. By the completion of the course, the senior student will be able to specify a thesis topic, specify individual thesis learning objectives, specify individual thesis learning activities, develop a thesis project time-line, implement the thesis project, write the thesis, and present it to the Health Information Management faculty and students. Topics are chosen by the student but require approval by the Program Coordinator.

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**DEPARTMENT**

**NURSING**

Department Chair: Debra Huber, PhD, APRN
Location: Marriott Allied Health Building, Rm 437
Telephone Contact: Suzanne Budge (801) 626-6142

Program Outreach Coordinator: Pam Hugie, MSN, RN
Telephone Contact: Aiko Flowers (801) 626-6134

PN/ADN Level Coordinator: Pam Rice, MSN, RN
Telephone Contact: Marguerite Simmons (801) 626-7416

BSN Level Coordinator: Evelyn N. Draper, MA, RN
Telephone Contact: Ericka Turner (801) 626-6122

Interim Student Affairs Coordinator: Debra Huber, PhD, APRN
Telephone Contact: Marguerite Simmons (801) 626-7416

**OGDEN CAMPUS FACULTY:** Professor Emerita: Evelyn Draper; Professor: Debra Huber; Associate Professors: Dr. Cheryl Brady, Kathy Culliton, Karen Dewey, Linda Forrest, JoAnn Hackley, Pam Hugie, Pam Molen, Judith Pratt, Pam Rice, Susan Thomock, Deanna Williams, Barbara Wirick; Assistant Professors: Jay Barton, Tamara Chase, Marilyn Cox, Jill Daly, London Draper, Allen Hanberg, Linda Hofmann, Julie Killebrew, M. Slobhan Kline, Diane Leggett, Laura Mahler, Pamela Merkley, Kathleen Stezma; Instructors: Mary Ann Anderson, Carol Wolinsky

**USU CAMPUS FACULTY:** Assistant Professors: Joanne Duke, Debra Haas, Lori Hart, Jonny Kelly, Kelly Shoell

**SUU CAMPUS FACULTY:** Assistant Professor: Donna Lister; Assistant Professors: Deann Brown, Susan Gardner, Alan Pearson, Janet Warner

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**WEBER STATE UNIVERSITY**

2003-2004 CATALOG

**Entry Options**

**Practical Nursing:** The first year of the nursing program constitutes the practical nursing curriculum. Students selecting this option are awarded an Institutional Certificate by WSU following one year of study. For licensure as a practical nurse, graduates are required to successfully pass the National Council of Licensure Examination (NCLEX-PN).

**AS:** Two years are required for students entering this option. Students selecting this option must complete nursing major credits plus fulfill university general education credits required for graduation with an associate of science degree. Students selected for an associate of science degree in nursing may take the NCLEX-PN through the equivalency clause in the Utah Nurse Practice Act at completion of the first year. An additional year of course work entitles graduates to take the National Examination for licensure as a registered nurse (NCLEX-RN).

**AAS:** Two years are required for students entering this option. Students selected for an associate of applied science degree in nursing may take the NCLEX-PN through equivalency clause in the Utah Nurse Practice Act at completion of the first year. An additional year of course work entitles graduates to take the National Examination for licensure as a registered nurse (NCLEX-RN).

**Practical Nurse (PN) to AS/AAS (PN to RN):** This entry option is open only to PNs. Entering students enroll for the second year of the AS/AAS nursing program. Graduates take the NCLEX-RN at completion of this curricular year.

**RN to BSN:** Licensure as an RN is required for entry into the Baccalaureate degree program as well as admitted admission criteria. This option is open for RN’s who have been out of school for an unspecified period of time and have work experience or for the new AAS or AD graduate who has successfully passed NCLEX. The upper division BSN curriculum rounds out the nursing program at this level. A seamless transition (option) offered to current WSU AS/AAS RN students at time of graduation. Valid RN license required for progression to second semester.

**Statewide Program**

Cooperative, contractual, and outreach campuses bring the WSU nursing program to all sectors of the State.

**Cooperative Campuses:** AS or AAS and RN to BSN options are offered at cooperative campuses located at Utah State University in Logan and Southern Utah University in Cedar City.

**Contractual Campus:** A PN to AS or AAS Program is offered in affiliation with the Davis Applied Technology College in Kaysville.
Outreach Campuses: Developed in response to rural needs, PN, PN to AA/AAS, and RN to BSN options are offered through outreach education. Dependent upon local needs and available funding, outreach programs are offered at various campuses throughout the state for specified time periods. Campus locations and entry level offerings vary from year to year.

Licensure
Applicants who have been convicted of a felony, treated for serious mental illness or substance abuse should discuss their eligibility status with the Utah Board of Nursing. Acceptance to the nursing program does not assure eligibility for a PN or RN license. The Utah Board of Nursing makes final decisions on issue of professional licensure.

Accreditation
The nursing program (PN, AA/AAS and BSN) is accredited by the National League for Nursing Accrediting Commission (NLNAC). National League of Nursing Accrediting Commission 61 Broadway New York, NY 10006 Phone: (212) 363-5555 extension 153, Fax: (212) 812-0309 www.nlnac.org

Admission Process For Entry Options
Practical Nursing
Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to the Practical Nursing program. Admission selections are made once per year. Applications may be obtained from the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. Applications must be completed and post-marked by 1 February each year. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

Program selects begin prerequisite summer semester and are admitted autumn semester. All summer prerequisite courses must be successfully completed with a "C" grade or better in order to advance into fall semester. Admission requirements include the following:
- Completion of Certified Nursing Assistant Course Form, Certified Nursing Assistant
- Certificate or Certified Nursing Assistant Recertification Letter
- Graduation from high school or equivalent program
- Admission to Weber State University
- Completed application to Practical Nursing program and payment of the $20 application fee.
- Complete Utah criminal background check
- Cumulative GPA of 2.5
- ACT composite score of 18
- Completion of the following Math Requirements:
  - ACT Math score of 23 or higher (within 24 months of applying).
  - Math 1010 within 12 months of applying. If over 12 months, then applications must:
    - Take math COMPASS test (no older than 1 year) and place into
    - Math QL1030, QL1040, QL1050, QL1060 or QL1080
    - Repeat Math 1010
  - OR
  - Complete of Quantitative Literacy (Math QL1030, QL1040, QL1050, QL1060 or QL1080; AP Calculus or AP Statistics with score of 3 or better; or math COMPASS with score of 65 or higher)
  - Admission to Weber State University
  - Completion application to Associate of Science/Associate of Applied Science Degree option and payment of the $20 application fee

Practical Nurse (PN) to AS/AAS (PN to RN or “Advanced Placement”)

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to PN to RN program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements include the following:
- Graduate of Practical Nursing Program or equivalent program (a challenge examination may be required for those graduating from an equivalent program)
- Completion of WSU general education requirements for Practical Nursing with “C” grade or better
- Complete Utah criminal background check

Associate of Science/Associate of Applied Science Degree Nursing

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate of Science/Associate of Applied Science Degree Nursing program. Admission selections are made once per year. Applications may be obtained from the Nursing Admission Counselor, Room MH108B in the Dr. Ezekiel R. Dumke College of Health Professions. Applications must be completed and on file by 1 February each year. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

Program selects begin prerequisite summer semester and are admitted autumn semester. All summer prerequisite courses must be successfully completed with a “C” grade or better in order to advance into fall semester. Admission requirements include the following:
- Completion of Certified Nursing Assistant Course Form, Certified Nursing Assistant
- Certificate or Certified Nursing Assistant Recertification Letter
- Graduation from high school or equivalent program
- Cumulative grade point average of 3.0
- Complete Utah criminal background check
- ACT composite score of 22
- Completion of the following Math Requirements:
  - ACT Math score of 23 or higher (within 24 months of applying).
  - Math 1010 within 12 months of applying. If over 12 months, then applications must:
    - Take math COMPASS test (no older than 1 year) and place into
    - Math QL1030, QL1040, QL1050, QL1060 or QL1080
    - Repeat Math 1010
  - OR
  - Complete of Quantitative Literacy (Math QL1030, QL1040, QL1050, QL1060 or QL1080; AP Calculus or AP Statistics with score of 3 or better; or math COMPASS with score of 65 or higher)
  - Admission to Weber State University
  - Completion application to Associate of Science/Associate of Applied Science Degree option and payment of the $20 application fee

Education
Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to the Practical Nursing program. Admission selections are made once per year. Applications may be obtained from the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. Applications must be completed and post-marked by 1 February each year. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

Program selects begin prerequisite summer semester and are admitted autumn semester. All summer prerequisite courses must be successfully completed with a “C” grade or better in order to advance into fall semester. Admission requirements include the following:
- Completion of Certified Nursing Assistant Course Form, Certified Nursing Assistant
- Certificate or Certified Nursing Assistant Recertification Letter
- Graduation from high school or equivalent program
- Admission to Weber State University
- Completed application to Practical Nursing program and payment of the $20 application fee.
- Complete Utah criminal background check
- Cumulative GPA of 2.5
- ACT composite score of 18
- Completion of the following Math Requirements:
  - ACT Math score of 23 or higher (within 24 months of applying).
  - Math 1010 within 12 months of applying. If over 12 months, then applications must:
    - Take math COMPASS test (no older than 1 year) and place into
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  - Admission to Weber State University
  - Completion application to Associate of Science/Associate of Applied Science Degree option and payment of the $20 application fee

Practical Nurse (PN) to AS/AAS (PN to RN or “Advanced Placement”)

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to PN to RN program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements include the following:
- Graduate of Practical Nursing Program or equivalent program (a challenge examination may be required for those graduating from an equivalent program)
- Completion of WSU general education requirements for Practical Nursing with “C” grade or better
- Complete Utah criminal background check

Associate of Science/Associate of Applied Science Degree Nursing

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants for admission must first apply for admission to Weber State University. Applicants must also apply for admission to the Associate of Science/Associate of Applied Science Degree Nursing program. Admission selections are made once per year. Applications may be obtained from the Nursing Admission Counselor, Room MH108B in the Dr. Ezekiel R. Dumke College of Health Professions. Applications must be completed and on file by 1 February each year. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

Program selects begin prerequisite summer semester and are admitted autumn semester. All summer prerequisite courses must be successfully completed with a “C” grade or better in order to advance into fall semester. Admission requirements include the following:
- Completion of Certified Nursing Assistant Course Form, Certified Nursing Assistant
- Certificate or Certified Nursing Assistant Recertification Letter
- Graduation from high school or equivalent program
- Cumulative grade point average of 3.0
- Complete Utah criminal background check
- ACT composite score of 22
- Completion of the following Math Requirements:
  - ACT Math score of 23 or higher (within 24 months of applying).
  - Math 1010 within 12 months of applying. If over 12 months, then applications must:
    - Take math COMPASS test (no older than 1 year) and place into
    - Math QL1030, QL1040, QL1050, QL1060 or QL1080
    - Repeat Math 1010
  - OR
  - Complete of Quantitative Literacy (Math QL1030, QL1040, QL1050, QL1060 or QL1080; AP Calculus or AP Statistics with score of 3 or better; or math COMPASS with score of 65 or higher)
  - Admission to Weber State University
  - Completion application to Associate of Science/Associate of Applied Science Degree option and payment of the $20 application fee

Practical Nurse (PN) to AS/AAS (PN to RN or “Advanced Placement”)

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to Weber State University. Applicants must also apply for admission to PN to RN program. Admission times and deadlines vary according to campus location. For applications and deadline information, please contact the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements include the following:
- Graduate of Practical Nursing Program or equivalent program (a challenge examination may be required for those graduating from an equivalent program)
- Completion of WSU general education requirements for Practical Nursing with “C” grade or better
- Complete Utah criminal background check
• Cumulative GPA of 2.7
• Completion of the following Math Requirements:
  - ACT Math score of 23 or higher (within 24 months of applying).
  - Math 1010 within 12 months of applying. If over 12 months, test taken
    no earlier than one year before application.
  - Math COMPASS test (no earlier than one year before application) and
    place into Math QL1030, QL1040, QL1050, QL1060 or QL1080
  - Repeat Math 1010
• Completion of Quantitative Literacy (Math QL1030, QL1040, QL1050, QL1060 or QL1080; AP Calculus or AP Statistics with score of 3 or better; or math COMPASS with score of 65 or higher)
• Admission to Weber State University
• Completed application to PN to AS/AAS option and payment of
  the $20 application fee
• Successful completion of PN Comprehensive Predictor

Baccalaureate Nursing

Telephone Contact: DCHP Admissions Office (801) 626-6128

Applicants must first apply for admission to, or be a current matriculated student of, Weber State University. Applicants must also apply for admission to Baccalaureate Nursing option. Admissions are two times per year for Ogden campus and once per program cycle for Cedar City and Outreach sites. Applications are available year round and may be obtained from the Nursing Admission Counselor in Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions. Applications must be completed and on file by 1 April for fall admission and 1 November for spring admission for Ogden campus. A $20 application fee must be paid at the time the application is submitted. Admission applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail. Admission requirements include the following:

- Graduation from an accredited diploma, Associate of Science Degree Nursing Program, or Associate of Applied Science Degree Nursing Program
- Successful completion of NLN Mobility Profile II examination for registered nursing graduates from diploma programs of NON-NLNAC accredited programs
- Completion of prerequisite courses
- Completion of WSU general education requirements for the Associate of Science Degree
- Current Utah RN license
- Complete Utah criminal background check
- Cumulative GPA of 3.0
- Admission to Weber State University
- Completed application to baccalaureate nursing and payment of the $20 application fee

Baccalaureate Nursing for Registered Nurses - Ogden Campus

BSN Level Coordinator: Evelyn N. Draper, MA, RN
Telephone Contact: Ericka Turner (801) 626-6122

- Program Prerequisite: Completion of A.A.S. degree, A.S. degree, or Diploma nursing program certificate; current licensure as a registered nurse in the State of Utah; Application to and acceptance into the BSN program (see the preceding section for Admission Requirements).
- Minor: Not required.

Grade Requirements: A minimum grade of "B-" or better is required in all upper division nursing courses, and a grade of "C" or better is required for all support courses.

Credit Hour Requirements: A total of 120 credit hours is required for a Baccalaureate Science Degree. Of the 120 hours, 40 must be upper division level (UD) (courses numbered 3000 or higher). The nursing curriculum provides 37 UD hours leaving 3 credits open for an UD elective. Students entering the BSN program with an Associate’s Degree usually have enough General Education credits to meet the 120 hour requirement, but AAS degree students will require more general education credits for graduation.

Admission

Contact the DCHP Admissions Office (801-626-6128) for admission advisement.

Admission Requirements

See column to the left.

General Education

Refer to pages 36-41 for Bachelor of Science requirements. However, the degree with which a student enters the BSN program, the institution at which the degree was obtained, and the year the student first attended Weber State all affect general education requirements. Each student must seek individual advisement on needed requirements. The BS degree also requires fulfillment of University Scientific Inquiry and Diversity requirements.

Course Requirements For B.S. Degree

Nursing Courses Required (37 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursng 3010</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 3020</td>
<td>3</td>
</tr>
<tr>
<td>Nursng SI3030</td>
<td>2</td>
</tr>
<tr>
<td>Nursng SI3031</td>
<td>2</td>
</tr>
<tr>
<td>Nursng SI3035</td>
<td>2</td>
</tr>
<tr>
<td>Nursng 3040</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 3050*</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 3051*</td>
<td>2</td>
</tr>
<tr>
<td>Nursng 3060*</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 3061*</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 3080</td>
<td>3</td>
</tr>
<tr>
<td>Nursng DV4020</td>
<td>3</td>
</tr>
<tr>
<td>Nursng DV4021</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 4030</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 4040</td>
<td>3</td>
</tr>
<tr>
<td>Nursng 4041</td>
<td>3</td>
</tr>
</tbody>
</table>

*Credit for Nursng 3030, 3031, 3040, 3050, 3051, 3060, 3061, 4020, 4021, 4040, and 4041 may be earned through validation of prior learning. Written validation of experience is required.

Upper Division Elective (3 credit hours)

Baccalaureate Nursing

HONORS OPTION

- Program Prerequisite: Enroll in the General Honors Program and complete six (6) hours of General Honors courses (see the Honors Program on page 43).
- Grade Requirements: Maintain an overall GPA of 3.3.
Credit Hour Requirements: Fulfill requirements for a Bachelor of Science with a Nursing major. A student may receive Nursing Honors credit in any upper division nursing class. At least fifteen (15) credit hours of upper division Nursing courses must be taken with an Honors component. The fifteen hours must include Nursing 4800 (Guided Research), taken for a minimum of two (2) credit hours, but not more than six (6) credit hours.

Grade Requirements: Make application and be accepted to the program (see page 243 for Admission Requirements).

Program Prerequisite: Make application and be accepted to the program (see page 243 for Admission Requirements).

Graduate Requirements: Make application and be accepted to the program (see page 243 for Admission Requirements).

Credit Hour Requirements: Make application and be accepted to the program (see page 243 for Admission Requirements).

Program Prerequisite: Make application and be accepted to the program (see page 243 for Admission Requirements).

Grade Requirements: Make application and be accepted to the program (see page 243 for Admission Requirements).

Credit Hour Requirements: Make application and be accepted to the program (see page 243 for Admission Requirements).

Statement: Contact the DCHP Admissions Office (801-626-6128) for admission advisement.

Admission Requirements: See page 243.

Course Requirements for Institutional Certificate

Nursing Courses Required (must be taken in sequence)

First Year Fall
- Nursng 1030 Foundations of Nursing Practice (3)
- Nursng 1031 Foundations of Nursing Practice Clinical (3)
- Nursng 1050 Treatment Modalities I (3)

First Year Spring
- Nursng 1040 Women's Health & the Childbearing Family (2)
- Nursng 1041 Women's Health & the Childbearing Family Clinical (1)
- Nursng 1045 Nursing Care of Adults & Children I (3)
- Nursng 1046 Nursing Care of Adults & Children Clinical (2)

Support Courses Required (must be taken in sequence)

First Year Summer
- OPTION I
  - HthSc LS1110 Health Sciences (Biomed) (4)
  - HthSc 1111 Health Sciences Lab (Biomed) (4)
  - Chem PS/SI1050 Intro to General, Organic & Biochemistry (5)
  - or Chem PS/SI1110 Elementary Chemistry (5)
- OPTION II
  - Zoology 2100 Human Anatomy (4)
  - Zoology 2200 Human Physiology (4)
  - Chem PS/SI1050 Intro to General, Organic & Biochemistry (5)
  - or Chem PS/SI1110 Elementary Chemistry (5)

First Year Fall
- Micro LS1113 Intro Microbiology (3)
- Nutri LS1020 Foundations of Nutrition (3)

First Year Spring
- Engl EN1010 Intro to Writing (3)
- Psych SS1010 Intro to Psychology (3)

Note: If you are planning on advancing to BSN, Math QL1030, QL1040, QL1050, QL 1060 or QL1080 is a required prerequisite.

Nursing - Ogden Campus

Associate of Science Degree (A.S.)

PN/ADN Level Coordinator: Pam Rice, MSN, RN
Telephone Contact: Marguerite Simmons (801) 626-7416

Program Prerequisite: Make application and be accepted to the program.

Grade Requirements: A minimum grade of “B-” in all Nursing courses in addition to a grade of “C” in each support course.

Credit Hour Requirement: A minimum of 40 credit hours is required.

Advisement
Contact the DCHP Admissions Office (801-626-6128) for admission advisement.

Admission Requirements:
See page 243.

General Education:
Required general education courses for the Associate of Science are referenced in the course requirements below. Refer to pages 36-41 for Associate of Science additional general education requirements.

Course Requirements for A.S. Degree

Nursing Courses Required (must be taken in sequence)

First Year Fall
- Nursng 1030 Foundations of Nursing Practice (3)
- Nursng 1031 Foundations of Nursing Practice Clinical (3)
- Nursng 1050 Treatment Modalities I (3)

First Year Spring
- Nursng 1040 Women's Health & the Childbearing Family (2)
- Nursng 1041 Women's Health & the Childbearing Family Clinical (1)
- Nursng 1045 Nursing Care of Adults & Children I (3)
- Nursng 1046 Nursing Care of Adults & Children Clinical (2)

Second Year Summer
- Nursng *1124 Transition into Associate Degree Nursing (2)

* Depending upon a student’s previous LPN program of study and/or years practice experience, LPN students accepted into the PN to RN Program may be required to successfully complete a transition course (Nursng 1124). The Program/Level Manager will notify those LPN’s accepted into the program if this course is required.

Second Year Fall
- Nursng 2050 Treatment Modalities II (2)
- Nursng 2060 Psychiatric/Mental Health Nursing Across the Lifespan (2)
- Nursng 2061 Psychiatric/Mental Health Nursing Across the Lifespan Clinical (1)
**Nursing Courses Required**

| First Year Fall | Nursng 1031 | Foundations of Nursing Practice (3) |
|                | Nursng 1050 | Treatment Modalities I (3) |
| First Year Spring | Nursng 1040 | Women's Health & the Childbearing Family (2) |
|                | Nursng 1041 | Women's Health & the Childbearing Family Clinical (1) |
|                | Nursng 1045 | Nursing Care of Adults & Children I (3) |
|                | Nursng 1046 | Nursing Care of Adults & Children I Clinical (2) |
| Second Year Fall | Nursng *1124 | Transition into Associate Degree Nursing (2) |

*Depending upon a student's previous LPN program of study and/or years practice experience, LPN students accepted into the PN to RN Program may be required to successfully complete a transition course (Nursng 1124). The Program/Level Manager will notify those LPN's accepted into the program if this course is required.

<table>
<thead>
<tr>
<th>Support courses required (must be taken in sequence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year support courses must be completed prior to progression to second year.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Year Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTION I</td>
</tr>
<tr>
<td>HthSci LS1110</td>
</tr>
<tr>
<td>HthSci LS1111</td>
</tr>
<tr>
<td>Chem PS/SI1050</td>
</tr>
<tr>
<td>or Chem PS/SI1110</td>
</tr>
<tr>
<td>Social Science Gen Ed Course (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>or OPTION II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoology 2100</td>
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<tr>
<td>Zoology 2200</td>
</tr>
<tr>
<td>Chem PS/SI1050</td>
</tr>
<tr>
<td>or Chem PS/SI1110</td>
</tr>
<tr>
<td>Social Science Gen Ed Course (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Year Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro LS1113</td>
</tr>
<tr>
<td>Nutri LS1020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Year Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engl EN1010</td>
</tr>
<tr>
<td>Psych SS1010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>HthSci 2230</td>
</tr>
<tr>
<td>American Institution Gen Ed Course (3)</td>
</tr>
<tr>
<td>Humanities Gen Ed Course (3)</td>
</tr>
<tr>
<td>Gen Ed QL Math (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engl EN2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Ed HU or CA</td>
</tr>
<tr>
<td>Gen Ed QL* Math</td>
</tr>
<tr>
<td>Gen Ed CA</td>
</tr>
</tbody>
</table>

*Note: If you are planning on advancing to BSN, Math QL1030, QL1040, QL1050, QL1060 or QL1080 is a required prerequisite.

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**Webber State/Utah State University Cooperative Nursing - Logan Campus**

**Associate of Science Degree (A.S.)**

**Advisement** Contact the DCHP Admissions Office (801-626-6128) for admission advisement.

*Note: If you are planning on advancing to BSN, Math QL1030, QL1040, QL1050, QL1060 or QL1080 is a required prerequisite.
Admission Requirements

Students apply for admission by contacting the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions, Weber State University, Ogden, Utah, 84408-3907 (801-626-6128). Deadline for applying is 1 February. A $20 application fee must be paid at the time the application is submitted. Applications are reviewed by the Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

General Education

General education courses required are referenced in the course requirements that follow. Please also refer to the university general education requirements and check with the campus manager.

Course Requirements for A.S. Degree

Nursing Courses Required (must be taken in sequence)

<table>
<thead>
<tr>
<th>First Year Fall</th>
<th>Nursng 1030</th>
<th>Foundations of Nursing Practice (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursng 1031</td>
<td>Foundations of Nursing Practice Clinical (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1050</td>
<td>Treatment Modalities I (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Spring</td>
<td>Nursng 1040</td>
<td>Women's Health &amp; the Childbearing Family (1)</td>
</tr>
<tr>
<td>Nursng 1041</td>
<td>Women's Health &amp; the Childbearing Family (1)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1045</td>
<td>Nursing Care of Adults &amp; Children I (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1046</td>
<td>Nursing Care of Adults &amp; Children I Clinical (2)</td>
<td></td>
</tr>
<tr>
<td>Second Year Fall</td>
<td>Nursng *1124</td>
<td>Transition into Associate Degree Nursing (2)</td>
</tr>
</tbody>
</table>

Support Courses Required (must be taken in sequence)

<table>
<thead>
<tr>
<th>First Year Summer</th>
<th>Biol 2000</th>
<th>Human Physiology (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol 2010</td>
<td>Anatomy (4)</td>
<td></td>
</tr>
<tr>
<td>Chem 1110 or 1050</td>
<td>Humanities elective (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Fall</td>
<td>Biol 1110</td>
<td>Microbiology (4)</td>
</tr>
<tr>
<td>or Micro 1100 (3)</td>
<td>Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>NFS 1020</td>
<td>Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Spring</td>
<td>Psy 1010</td>
<td>General Psychology (3)</td>
</tr>
<tr>
<td>HS 2230</td>
<td>Intro to Pathophysiology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Course Requirements for A.A.S Degree

Nursing Courses Required (must be taken in sequence)

<table>
<thead>
<tr>
<th>First Year Fall</th>
<th>Nursng 1030</th>
<th>Foundations of Nursing Practice (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursng 1031</td>
<td>Foundations of Nursing Practice Clinical (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1050</td>
<td>Treatment Modalities I (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Spring</td>
<td>Nursng 1040</td>
<td>Women's Health &amp; the Childbearing Family (1)</td>
</tr>
<tr>
<td>Nursng 1041</td>
<td>Women's Health &amp; the Childbearing Family Clinical (1)</td>
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</tr>
<tr>
<td>Nursng 1045</td>
<td>Nursing Care of Adults &amp; Children I (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1046</td>
<td>Nursing Care of Adults &amp; Children I Clinical (2)</td>
<td></td>
</tr>
<tr>
<td>Second Year Fall</td>
<td>Nursng *1124</td>
<td>Transition into Associate Degree Nursing (2)</td>
</tr>
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</table>

Support Courses Required (must be taken in sequence)

<table>
<thead>
<tr>
<th>First Year Summer</th>
<th>Biol 2000</th>
<th>Human Physiology (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol 2010</td>
<td>Anatomy (4)</td>
<td></td>
</tr>
<tr>
<td>Chem 1110 or 1050</td>
<td>Humanities elective (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Fall</td>
<td>Biol 1110</td>
<td>Microbiology (4)</td>
</tr>
<tr>
<td>or Micro 1100 (3)</td>
<td>Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>NFS 1020</td>
<td>Nutrition (3)</td>
<td></td>
</tr>
<tr>
<td>First Year Spring</td>
<td>Psy 1010</td>
<td>General Psychology (3)</td>
</tr>
<tr>
<td>HS 2230</td>
<td>Intro to Pathophysiology (3)</td>
<td></td>
</tr>
</tbody>
</table>

Second Year Summer

<table>
<thead>
<tr>
<th>Eng EN1010 English (3)</th>
<th>Quantitative Literacy (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Arts elective (3)</td>
<td>Social Science elective (3)</td>
</tr>
</tbody>
</table>

Second Year Fall

<table>
<thead>
<tr>
<th>Eng EN2010 English (3)</th>
<th>American Institutions (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Year Spring</td>
<td>Humanities elective (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year Summer</th>
<th>Eng EN1010 English (3)</th>
<th>Quantitative Literacy (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Arts elective (3)</td>
<td>Social Science elective (3)</td>
<td>Second Year Fall</td>
</tr>
<tr>
<td>Eng EN2010 English (3)</td>
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</tbody>
</table>
**Weber State/Southern Utah University Cooperative Nursing - SUU Campus**

**ASSOCIATE OF SCIENCE DEGREE (A.S.)**

**ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)**

**Campus Manager:** Donna Lister, MS, RN  
**Telephone Contact:** Teresa Higbee (435) 586-7915

- **Program Prerequisite:** Make application and be accepted to the program (see the Admission Requirements below).
- **Grade Requirements:** A grade of "B-" in all Nursing courses in addition to a grade of "C" in each support course.
- **Credit Hour Requirements:** A minimum of 69 credit hours is required for the A.A.S. A minimum of 84 credit hours is required for the A.S.

**Advisement**  
Contact the DCHP Admissions Office (801-626-6128) for admission advisement.

**Admission Requirements**  
Students apply for admission by contacting the Nursing Admission Counselor, Room MH108B, Dr. Ezekiel R. Dumke College of Health Professions, Weber State University, Ogden, Utah 84408-3907 (801-626-6128). Admissions are done every year. Deadline for applying is 1 February. A $20 application fee must be paid at the time the application is submitted. Applications are reviewed by the Nursing Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

General education courses required for the A.A.S. are referenced in the course requirements that follow. The A.S. will require additional university general education courses not listed. Please refer to the university general education requirements and check with the campus manager.

**Course Requirements for A.A.S. or A.S. Degree**  
Refer to the university general education requirements for the additional general education courses required for the A.S. degree.

**Nursing Courses Required (must be taken in sequence)**

<table>
<thead>
<tr>
<th>First Year Fall</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursng 1030</td>
<td>Foundations of Nursing Practice (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1031</td>
<td>Foundations of Nursing Practice Clinical (3)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Year Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursng 1040</td>
<td>Women's Health &amp; the Childbearing Family (2)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1041</td>
<td>Women's Health &amp; the Childbearing Family Clinical (1)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1045</td>
<td>Nursing Care of Adults &amp; Children I (3)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1046</td>
<td>Nursing Care of Adults &amp; Children I Clinical (2)</td>
<td></td>
</tr>
<tr>
<td>Nursng 1050</td>
<td>Treatment Modalities I (3)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursng 1011*1124</td>
<td>Transition into Associate Degree Nursing (2)</td>
<td></td>
</tr>
</tbody>
</table>

*Depending upon a student’s previous LPN program of study and/or years practice experience, LPN students accepted into the PN to RN Program may be required to successfully complete a transition course (Nursng 1124). The Program/Level Manager will notify those LPN’s accepted into the program if this course is required.

<table>
<thead>
<tr>
<th>Second Year Fall</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Nursng 2050</td>
<td>Treatment Modalities II (2)</td>
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<tr>
<td>Nursng 2070</td>
<td>Nursing Care of Adults &amp; Children II (3)</td>
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</tr>
<tr>
<td>Nursng 2071</td>
<td>Nursing Care of Adults &amp; Children II Clinical (4)</td>
<td></td>
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</tbody>
</table>

**Support courses required (must be taken in sequence)**

First year support courses must be completed prior to progression to second year.

<table>
<thead>
<tr>
<th>First Year Summer</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biol 2010</td>
<td>Human Physiology (3)</td>
<td></td>
</tr>
<tr>
<td>Biol 2020</td>
<td>Human Physiology Lab (1)</td>
<td></td>
</tr>
<tr>
<td>Biol 2110</td>
<td>Elementary Micro (3)</td>
<td></td>
</tr>
<tr>
<td>Biol 2120</td>
<td>Elementary Micro Lab (1)</td>
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</tr>
<tr>
<td>Biol 2210</td>
<td>Anatomy (3)</td>
<td></td>
</tr>
<tr>
<td>Biol 2220</td>
<td>Anatomy Lab (1)</td>
<td></td>
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<tr>
<td>First Year Fall</td>
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<td></td>
</tr>
<tr>
<td>HlthSci 2230</td>
<td>Intro to Pathophysiology (WSU Course) (3)</td>
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<tr>
<td>NFS 1020</td>
<td>Scientific Foundations of Human Nutrition (3)</td>
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<tr>
<td>First Year Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psych 1010</td>
<td>General Psychology (3)</td>
<td></td>
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<tr>
<td>Second Year Summer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chem 1110</td>
<td>Elementary Chemistry (3)</td>
<td></td>
</tr>
<tr>
<td>or Chem 1050</td>
<td>Intro to General, Organic &amp; Biochemistry (4)</td>
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</tr>
<tr>
<td>Chem 1120</td>
<td>Elementary Chemistry Lab (1)</td>
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<tr>
<td>Engl 1010</td>
<td>English (3)</td>
<td></td>
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<td></td>
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<tr>
<td>Second Year Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engl 2010</td>
<td>English (3)</td>
<td></td>
</tr>
<tr>
<td>or Eng 2110</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Year Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen Ed HU Humanities (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative Literacy (Math) (contact Nursing Department)</td>
<td></td>
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</tr>
</tbody>
</table>

**Weber State/Southern Utah University Cooperative Baccalaureate Nursing for Registered Nurses (RN to BSN)**

**BACHELOR OF SCIENCE DEGREE (B.S.)**

**Campus Manager:** Donna Lister, MS, RN  
**Telephone Contact:** (SUU Campus) Teresa Higbee (435) 586-7915  
(WSU Campus) Ericka Turner (801) 626-6122

The baccalaureate option offered is RN to BSN Admissions are done every year. Admission information may be obtained by contacting Robert Holt, DCHP Admission Counselor, Room MH108B, Dumke College of Health Professions, Weber State University, Ogden, Utah 84408-3907 (801-626-6128).

Please refer to the Baccalaureate Nursing for Registered Nurses requirements listed in this catalog for the Ogden Campus.

**Nursing Outreach Campuses**

**BACHELOR OF SCIENCE DEGREE (B.S.) - NURSING FOR REGISTERED NURSES (RN to BSN)**

**PN TO RN (A.A.S./A.A.S.)**

**INSTITUTIONAL CERTIFICATE - PRACTICAL NURSING**

**Outreach Coordinator:** Pam Hugie, MSN, RN  
**Telephone Contact:** Aiko Flowers (801) 626-6134

**Assistant Professors:** Laura Mahler

All nursing options are offered to campuses located throughout rural areas. Entry options and campus locations are publicized each year as rural needs are analyzed and funding received. Interested
applicants should contact the Nursing Admission Counselor for application materials and posting dates for selected entry option:

Robert Holt
Nursing Admission Counselor
Weber State University
Ogden, UT 84408-3914
(801) 626-6128

Applicants must meet all admission requirements for selected entry option as previously outlined. Applications are reviewed and evaluated by the Nursing Program Admissions and Advancement Committee. Applicants are notified of committee decision by mail.

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**NURSING COURSES - NURSNG**

**Nursng 1030. Foundations of Nursing Practice (3) F**
Nursing concepts are introduced which will be built upon throughout the nurse curriculum as students care for clients throughout the lifespan. The development of safe and effective basic nursing skills is emphasized as the students utilize the nursing process to meet the physiological, psychosocial, health promotional and maintenance needs of clients. Therapeutic communication techniques are presented as a means of promoting a caring approach to client interactions. Students are also socialized into the professional role of nursing and understand how to interact as part of a health care team. Credit hours (3): 3 lecture hours per week. Co-requisites: Nursng 1031, 1050. Must be taken concurrently with Nursng 1031.

**Nursng 1031. Foundations of Nursing Clinical (3) F**
A companion course taught in concert with Nursng 1030. Clinical experience running concurrently with Nursng 1030. Experience will be gained in long term care, lab, acute care, and home care. Clinical hours will be arranged and supervised by instructor. Credit hours (3): 9 clinical hours, 135 hours per semester. Co-requisites: Nursng 1030, 1050. Must be taken concurrently with Nursng 1030.

**Nursng 1040. Women’s Health and the Childbearing Family (2) S**
Theory focuses on meeting basic human needs of the family and newborn throughout the childbearing cycle. Skills focus on the normal pregnancy/labor/delivery/newborn/postpartum client. Credit hours (2): 2 lecture hours per week. Prerequisites: Nursng 1030, 1031, 1050. Co-requisites: Nursng 1041, 1045, 1046. Must be taken concurrently with Nursng 1041.

**Nursng 1041. Women’s Health and the Childbearing Family Clinical (1) S**
A companion course taught in concert with Nursng 1040. Clinical experience running concurrently with Nursng 1040. Application of theoretical knowledge to the acute care situation. Increased development of nursing skills during and immediately after childbirth. Some prenatal observational experiences may be provided. Credit hours (1): 3 clinical hours per week, 45 hours per semester. Prerequisites: Nursng 1030, 1031, 1050. Co-requisites: Nursng 1040, 1045, 1046. Must be taken concurrently with Nursng 1040.

**Nursng 1045. Nursing Care of Adults and Children I (3) S**
Focused theory with emphasis on the physiological and psychosocial needs of clients across the lifespan. Credit hours (3): 3 lecture hours per week. Prerequisites: Nursng 1030, 1031, 1050. Co-requisites: Nursng 1040, 1041, 1046. Must be taken concurrently with Nursng 1046.

**Nursng 1046. Nursing Care of Adults and Children I Clinical (2) S**
A companion course taught in concert with Nursng 1045. Guided clinical experiences with emphasis on the physiological and psychosocial needs of clients across the lifespan in a variety of health care settings. Credit hours (2): 6 clinical hours per week, 90 hours per semester. Prerequisites: Nursng 1030, 1031, 1050. Co-requisites: Nursng 1040, 1041, 1045. Must be taken concurrently with Nursng 1045.

**Nursng 1050. Treatment Modalities (3) F**
Basic treatments and pharmacological agents used by the nurse to promote health across the lifespan. Included in the course will be drugs affecting the respiratory system, parasympathetic and sympathetic system, cardiovascular system, central nervous system, and gastrointestinal system. Other drugs addressed include antibiotics, muscle relaxants, and antidepressants. Non-pharmacological treatment modalities addressed include comfort measures and play therapy. Credit hours (3): 3 lecture hours per week. Co-requisites: Nursng1030, 1031.

**Nursng 1124. Transition into Associate Degree Nursing (2) Su, F**
Socialization from practical nursing to the associate degree registered nurse level.

**Nursng 2050. Treatment Modalities (2) F, S**
Advanced treatments and pharmacological agents used by the nurse to promote health across the lifespan. Included in the course will be drugs affecting the endocrine system and cardiovascular system. Other drugs addressed include IV therapy, blood products, antibiotics, calcium replacement agents, anti-Parkinson drugs, prostate drugs, chemotherapy drugs and biological response modifiers. Non-pharmacological treatment modalities addressed include art, music therapy, therapeutic touch, humor, pet therapy, reminiscence therapy, meditation, visualization, imaging and validation therapy. Credit hours (2): 2 lecture hours per week. Prerequisites: Nursng 1030, 1031, 1040, 1041, 1045, 1046, 1050. Co-requisites: Nursng 2060, 2061, 2070, 2071.

**Nursng 2060. Psychiatric/Mental Health Nursing Across the Lifespan (2) F, S**
Students explore caring strategies for promoting mental health and preventing illness across the lifespan. The various roles and functions of the psychiatric nurse are introduced. Emphasis on the dynamics and theories behind basic psychopathological conditions. Students apply the nursing process for the restoration and rehabilitation of patients with psychiatric disorders. Enhancing communication skills in an interdisciplinary environment is a primary goal of this course. Credit hours (2): 2 lecture hours per week. Prerequisites: Nursng 1030, 1031, 1040, 1041, 1045, 1046. Co-requisites: Nursng 2050, 2070, 2071. Must be taken concurrently with Nursng 2061.

**Nursng 2061. Psychiatric/Mental Health Nursing Across the Lifespan Clinical (1) F**
A companion course taught in concert with Nursng 2060. Clinical application of psychiatric/mental health nursing taught in Nursng 2060. Students will be exposed to patients in a variety of health care settings with mental health needs. Credit hours (1): 3 clinical hours per week, 45 hours per semester. Prerequisites: Nursng 1030, 1031, 1040, 1041, 1045, 1046. Co-requisites: Nursng 2050, 2070, 2071. Must be taken concurrently with Nursng 2060.

**Nursng 2070. Nursing Care of Adults and Children II (3) F, S**
Theory with emphasis on more complex physiological and psychosocial needs of clients across the lifespan. Credit hours (3): 3 lecture hours per week. Prerequisites: Nursng 1030, 1031, 1040, 1041, 1045, 1046, 1050. Co-requisites: Nursng 2050, 2060, 2061. Must be taken concurrently with Nursng 2071.
Nurs 2071. Nursing Care of Adults and Children II (4) F, S
A companion course taught in concert with Nurs 2070. Clinical application of medical-surgical concepts learned in Nurs 2070. Students will provide care in a variety of health care settings. Credit hours (4): 12 clinical hours per week, 180 hours per semester. Prerequisites: Nurs 1030, 1031, 1040, 1041, 1045, 1046, 1050. Co-requisites: Nurs 3050, 2060, 2061. Must be taken concurrently with Nurs 2070.

Nurs 2080. Patient Care Management (2) F, S
Theory focuses on the synthesis of nursing knowledge and skills necessary for entrance into registered nursing practice. Preparation for NCLEX exams continues. Licensing, professionalism and management are addressed. Credit hours (2): 2 lecture hours per week. Prerequisites: 1030, 1031, 1040, 1041, 1045, 1046, 1050, 2050, 2060, 2061, 2070, 2071. Must be taken concurrently with Nurs 2081.

Nurs 2081. Patient Care Management Clinical (3) F, S
A companion course taught in concert with Nurs 2080. Clinical synthesis of nursing knowledge and skills necessary for entrance into registered Nursing Practice. Hours are concentrated into a 4 week block and completed as if student was a full time employee. Credit hours (3): 135 hours per semester. Prerequisites: Nurs 1030, 1031, 1040, 1041, 1045, 1046, 1050, 2050, 2060, 2061, 2070, 2071. Must be taken concurrently with Nurs 2080.

Nurs 2283. Directed Readings and Projects (1-3) F, S
Maximum 3 semester hours per year. Prerequisite: Instructor approval.

Nurs 2289. Cooperative Education (1-3)
Open to all students in nursing who meet the minimum coop requirements of this department. Involves planning and implementation of a project which promotes PN and/or ADN concepts and meets specific work place needs. Prerequisite: Instructor approval. Maximum 6 semester hours/year, maximum 3 semester hours/semester.

Nurs 3000. Basic Trauma Nursing (4)
This course will introduce the student to the skills basic to the care of the multiple trauma patient. It will include trauma incidence and statistics, triage, equipment and training. Approaches to trauma systems and centers will be addressed. This course will also introduce the student to the basic care of multiple systems injuries and will briefly cover pediatric trauma. This course will also introduce the student to drugs and equipment used with the multiple trauma patient. Credit hours: (4): 4 lecture hours per week. (Elective)

Nurs 3010. Nursing History and Theory (2) F
A writing intensive course that examines the historical and theoretical foundations for professional nursing practice. This course will provide a forum for students to scrutinize the historical evolution of professional nursing and the theoretical foundations which have emerged. Credit hours (2): 2 lecture hours per week.

Nurs SI3020. Nursing Research (2) F
A writing intensive course that examines nursing research. Students are encouraged to explore a research base for their personal nursing practice. Focus is on fundamental concepts of nursing research in practice and theory. Research is approached from a practice based model. Credit hours (2): 2 lecture hours per week.

Nurs 3030. Nursing Assessment Across the Life Span (2) F
Companion course to Nurs SI3031. Provides the theory requisite for the systematic examination and analysis of subjective and objective health assessment data obtained during the health assessment process. The health status of a client will be determined through the process of differential analysis of both the anecdotal evidence provided by the client and empirical evidence gathered during the physical examination. With this evidence, students will learn to apply the scientific process of formulating and testing hypothetical diagnoses. The overall purpose will be focused upon developing strategies and skills to assess the health care needs of people across the life span. Students are challenged to identify normal assessment findings and critically analyze variations from normal. Two (2) credit hours, two (2) lecture hours. Co-requisite Nurs SI3031 (must be taken concurrently with Nurs SI3031).

Nurs SI3031. Nursing Assessment Across the Life Span Clinical (1) F
Companion course to Nurs SI3030. Provides hands on clinical practice experience that will provide students experience with the equipment and requisite psychomotor skills employed in the systematic examination and analysis of subjective and objective health assessment data obtained during the health assessment process. Using these skills, the health status of a client will be determined through the process of differential analysis of both the anecdotal evidence provided by the client and empirical evidence gathered during the physical examination. With this evidence, students will learn to apply the scientific process of formulation and testing hypothetical diagnoses. The overall purpose will be focused upon developing strategies and skills to assess the health care needs of people across the life span. Students are challenged to identify normal assessment findings and critically analyze variations from normal. One (1) credit hour, three (3) clinical lab hours. Co-requisite Nurs SI3030 (must be taken concurrently with Nurs SI3030).

Nurs 3035. Gerontological Nursing (2)
With the aging of America and the ever-growing population of elderly persons in this society, it is essential that nursing professionals have both knowledge and understanding in the care of gerontological clients. This course addresses the emotional, social, physiological and behavioral changes that occur throughout the aging process. It models the highest standards of gerontological nursing practice in acute, long-term and community settings. Credit hours (2): 2 lecture hours per week. Co-requisites: HAS 3260 and Nurs 3010, 3020, 3030, 3031.

Nurs 3040. Nursing Concepts in Acute Illness (3) F, S
Explores advanced nursing concepts relevant to physiologic changes related to life threatening illness and injury. Age specific alterations in physiology will be identified and analyzed. Credit hours (3): 3 lecture hours per week. Prerequisites: HAS 3260 and Nurs 3010, 3020, 3030, 3031, 3035. Co-requisites: Nurs 3050, 3060, 4900.

Nurs 3050. Nursing: High Risk Family (3) F, S
At-risk families need multiple interventions from knowledgeable care givers to assist them through the intricacies of obtaining quality health care. Students identify, then integrate, complex nursing strategies in situations involving parents, infants, and children in high risk childbearing populations. Credit hours (3): 3 lecture hours per week. Prerequisites: HAS 3260 and Nurs 3010, 3020, 3030, 3031, 3035. Co-requisites: Nurs 3040, 4900. Must be taken concurrently with Nurs 3051.
Nursg 3051. Nursing: High Risk Family Clinical (2) F, S
A companion course taught in concert with Nursg 3050. Students develop cognitive and psychomotor skill in the assessment and management of complex problems of newborn and children in a laboratory setting and then experience patient interactions in a variety of clinical settings including home, community, and acute care. Credit hours (2): 6 clinical hours per week, 90 hours per semester. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisites: Nursg 3040, 4900. Must be taken concurrently with Nursg 3050.

Nursg 3060. Nursing: High Risk Adult (3) F, S
Advanced theories and concepts of nursing practice are explored in relation to adults experiencing life threatening alterations in health. Credit hours (3). 3 lecture hours per week. Prerequisites: HAS and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisites: Nursg 3040, 4900. Must be taken concurrently with Nursg 3061.

Nursg 3061. Nursing: High Risk Adult Clinical (2) F, S
A companion course taught in concert with Nursg 3060. Students provide care for adults with life threatening alterations in health and are able to apply and evaluate advanced therapeutic nursing interventions. Credit hours (2): 6 clinical hours per week, 90 hours per semester. Prerequisites: HAS and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisites: Nursg 3040, 4900. Must be taken concurrently with Nursg 3060.

Nursg 3080. Functional Operations in Nursing (2) Su, F, S
This course is designed to provide the learner with front line skills and knowledge in nursing management. A foundation for the application of the nursing management process as it relates to operations of health care delivery is provided. This course integrates clinical examples for acquisition of the skills of delegation for quality patient care; care delivery models and structures; critical decision making; team empowerment; conflict resolution; coaching and mentoring in the clinical setting; staff education and clinical competence assessment; resource control and allocation; and productivity and efficiency in health care.

Nursg 3890. Cooperative Education (1-3) F, S
Open to all students in nursing who meet the minimum coop requirements of this department. Involves planning and implementation of a project that promotes BSN concepts and meets specific work place needs. Prerequisite: Baccalaureate Coordinator approval. Maximum three credit hours TOTAL. (Elective)

Nursg DV4000. Culture and Health Care (2)
This course is an exploration of culture, health care issues and experiences at the local, regional, national, or international levels. The learner will study and compare the health care of a selected country/community from the cultural, political and educational perspective. Credit hours (2), 2 lecture hours per week. Prerequisite: Admission to Weber State University -- Recommended for nursing students, Licensed Nurses, and other healthcare providers.

Nursg DV4001. Clinical Experience Related to Culture and Health Care of Nurses (1-3)
This course is a Study Abroad Experience for Health Care Workers to explore the relationship between culture, health care and nursing issues at local, regional, national, and/or international levels. Information gained during Nursing 4000 will assist the student to put into practice the concepts learned Credit hours (1-3). Lab hours depend on the country visited. Co-requisite or prerequisite: Nursg 4000 related to area being visited.

Nursg 4010. Interdisciplinary Health Care Teams (3)
This course provides an interdisciplinary experience with the team concept as a priority. The students learn the role of the health care team members, each with their different skills and objectives. The course teaches students to practice an interdisciplinary approach as they research, interact and learn in the interdisciplinary environment of a health care setting. Cross-listed with DenSci & HthSci.

Nursg 4012. Issues in Nursing (2) F, S
Examine current issues in baccalaureate nursing practice with emphasis on advanced skills in client teaching/learning, application of computers for patient care, and practice issues applicable in the present health care environment. Students encouraged to identify issues relevant to their areas of practice. Credit hours (2): 2 lecture hours per week.

Nursg DV4020. Nursing: Community Health (3) F, S
With the varied roles of the community nurse identified and the health of the community as the focus, techniques in assessment are emphasized. Community populations at risk are identified and strategies to promote health and prevent disease are identified and evaluated. Credit hours (3): 3 lecture hours per week. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisite: Nursg 4900. Must be taken concurrently with Nursg DV4021.

Nursg DV4021. Nursing: Community Health Clinical (2) F, S
A companion course taught in concert with Nursg 4020. Clinical experience provides an opportunity for students to assess a selected community and learn how health issues are addressed in the community setting. The role of the nurse is emphasized as it pertains to enhancing the health status of individuals, groups and communities. Credit hours (2): 6 clinical hours per week, 90 hours per semester. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisite: Nursg 4900. Must be taken concurrently with Nursg DV4020.

Nursg 4030. Power, Policy, and Politics in Nursing (2) F, S
Types of power, political influences, and social forces which impact nurses and nursing are explored. Policy development, utilization of power, and politics are analyzed as methods to further the discipline of nursing. Credit hours (2): 2 lecture hours per week. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisite: Nursg 4900.

Nursg 4040. Nursing: Leadership and Management (3) F, S
A writing intensive course with syntheses of classical theories and principles of leadership and management and their application to the nursing profession. Students then apply strategies, processes and techniques of nurse/leader manager functions to simulated classroom situations. Credit hours (3): 3 lecture hours per week. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisite: Nursg 4900. Must be taken concurrently with Nursg 4041.

Nursg 4041. Nursing: Leadership and Management Clinical (2) F, S
A companion course taught in concert with Nursg 4040 whose focus is on a variety of leader/manager roles in multiple settings. Based on the application of critical thinking processes, students apply nursing theoretical and practice principles. Credit hours (2): 6 clinical hours per week, 90 hours per semester. Prerequisites: HAS 3260 and Nursg 3010, 3020, 3030, 3031, 3035. Co-requisite: Nursg 4900. Must be taken concurrently with Nursg 4040.

Nursg SI4800. Guided Research (1-3 credits - Variable hours) F, S
Scientific inquiry, research methodology, and writing for qualified students with instructor consent. There will be some emphasis on the critical appraisal of scientific publications and professional
literature. Students will be guided in the development and/or critique of clinical problem statements; hypotheses; theoretical foundations and research methodology; presentation of research findings. Ethical canons related to clinical research will be discussed. (Elective) Prerequisites: Nursng 3010, Nursng 3020 and instructor consent.

Nursng 4830. Directed Theoretical Readings (Variable hours) F, S
Activities to be arranged with instructor. (Elective)

Nursng 4900. Senior Seminar: Integration of Professional Concepts (1) F, S
Provides a forum for the integration of key baccalaureate nursing concepts and issues. Content analyzes these concepts and issues, assists students in using critical thinking to synthesize and debate various aspects of the issues and then evaluate outcomes. This course must be taken the last semester of the nursing program. Credit hours (1), 2 seminar hours per week. Prerequisites: HAS 3260 and Nursng 3010, 3020, 3030, 3031, 3035. Co-requisites: Nursng 3040, 3050, 3051, 3060, 4020, 4021, 4030, 4040, 4041.

OFFICE OF DISTANCE LEARNING

Director: Peg Wherry
Telephone: 801-626-6990

Due to the distance between metropolitan areas and vast rural sections within Utah and the Intermountain States, the Dr. Ezekiel R. Dumke College of Health Professions established an Office of Distance Learning in 1974. This office has been assigned the role of extending quality educational opportunities for health care personnel into communities throughout Utah and the Intermountain West. In carrying out its operation, the office functions in three areas: (1) designing and delivering special educational programs to meet the unique needs of rural areas; (2) facilitating modifications of on-campus programs to be offered off campus in a nontraditional manner; and (3) providing continuing education conferences, courses and seminars. The Office of Distance Learning works closely with the Division of Continuing Education in creating programs, classes and opportunities to meet the needs of health care personnel.

DEPARTMENT OF RADILOGIC SCIENCES

Department Chair: Robert J. Walker, Ph.D., R.T.(R)(MR)(CT)(QM), FASRT
Location: Marriott Health Building, Room 363
Telephone Contact: Jerri L. Byers, 801-626-6057
Toll Free Telephone: 1-800-848-7770, Option 2
Off-Campus Programs Contact: Aleta Wood, 801-626-6619
Admissions Counseling: Judith Joy, 801-626-7136
Instructor: Nancy L. Saurdiff
Adjunct Faculty: Dottie Winterston, Provo Radiography

Radiologic Sciences is a medical field that uses ionizing radiation, sound waves and magnetic fields to produce medical images for diagnostic purposes or to treat diseases by combining medical procedures with technology.

RADIOGRAPHY

The Radiography program is provided in an integrated manner of didactic instruction and the utilization of on-campus x-ray rooms, darkrooms, and clinical experience in Radiology departments of affiliated health facilities. During the course of the program, radiologic physics, anatomy, radiographic procedures, positioning and patient assessment are taught. The student participates in clinical experience within the affiliate health facilities throughout the program.

The program begins fall semester of the first year and continues through the summer of the second year. The student qualifies for an Associate of Applied Science degree upon completion of the general education requirements and the professional course work. Upper division elective courses completed during the program may be applied toward a baccalaureate degree.

BACHELOR DEGREE (B.S.)

To obtain a baccalaureate degree, the student must complete the WSU General Education requirements; a major and a minor emphasis; a quality assurance course; and RadTec S4943, Baccalaureate Thesis (3), or equivalent.

ASSOCIATE OF APPLIED SCIENCE DEGREE (A.A.S.)

Program Prerequisite: Complete the prerequisite courses; make application and be accepted to the program (refer to the Admission Requirements below).

Grade Requirements: Demonstrate ability to achieve scholastically.

Credit Hour Requirements: A total of 69 credit hours is required for graduation with an A.A.S. degree – 18 of these are prerequisite courses and 50 are didactic and clinical education courses.

Advisement

Students should meet with the admissions counselor at least annually for course and program review. Call 801-626-7136 for more information or to schedule an appointment.

Admission Requirements

• Be accepted to Weber State University and declare program of study as Radiography (2FR).
• Apply to the Radiography Program for acceptance and follow the procedures as outlined on the program application, which is in addition to the Weber State Admissions Application. The deadline date for applications to be received is January 10 of each year. Student selection is made during Spring semester and those accepted into the program begin their professional phase of the curriculum the following fall semester.
• Pay the $20 program application fee.
• Present a satisfactory high school and/or college(s) transcript(s).
• Complete the general education courses listed below.

General Education

Refer to pages 36-41 for A.A.S. degree requirements. The following are required:

- English EN1010 (3)
- English EN2020 (3)
- Quantitative Literacy - Math QL1040 (3) or Math QL1050 (4)
- Computer Literacy (demonstrate literacy) no credit
- Social Sciences Course (3)
- Humanities Course (3)
- Life Science (3)
- or Health Sciences (Biomed) LS1110 (4) and HlthSci 1111 (4)
Course Requirements for A.A.S. Degree

Courses Required (60 credit hours)

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Elective Courses (6-13 credit hours)

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<tr>
<td>RadTec 2992</td>
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Advanced Radiologic Sciences Bachelor Degree (B.S.)

The Advanced Radiologic Sciences program is designed to fill the continuing education needs of radiologic technologists, to provide a career ladder for those who wish to obtain additional skills in a specialized area, and to provide an opportunity to earn a Bachelor of Science (B.S.) degree. Programs of study are designed to meet the career goals of students in medical imaging modalities and for technical, management and educational positions. The following emphases or programs are available:

- Advanced Radiography
  - Magnetic Resonance Imaging and/or Computed Tomography (MRI and CT)
  - Cardiovascular-Interventional Technology (CIT)
  - Mammography (M)
  - Radiology Practitioner Assistant*

*The Radiology Practitioner Assistant program requires the consent of a supervising physician and 5 years experience as an ARRT registered technologist (R.T.).

- Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department of Radiologic Sciences, make application and be accepted to the program of choice (refer to the next column for Admission Requirements).
- Minor: Students may select any approved minor in consultation with a faculty advisor and the completion of an academic contract. A minor is not required for the Radiology Practitioner Assistant (RPA) program.
- Grade Requirements: After admittance into the program of choice, a GPA of 2.0 is required in all professional courses.
- Credit Hours: A total of 120 credit hours is required for graduation - 30-48 of these must be within the major emphasis.

Advisement

Students must meet with a faculty advisor and complete an academic contract for the program of study selected and should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment.

Admission Requirements

- Apply for admission to Weber State University;
- Apply to the program of choice and submit a $20.00 application fee;
- Submit active ARRT certification card or acceptable equivalent;
- Submit transcripts from all colleges and universities attended (if no college experience, submit a high school transcript and R.T. program transcript);
- Declare the program of study within the Advanced Radiologic Sciences major;
- Complete an academic contract in consultation with a faculty advisor.

General Education

Refer to pages 36-41 for Bachelor of Science requirements.

Specific Requirement: Students must complete an upper division research course in either the major area of emphasis or in the minor emphasis. The course must be equivalent to RadTec SI4943, Baccalaureate Thesis (3) and approved by a faculty advisor.

Course Requirements for B.S. Degree

Radiography Courses Required (5 credit hours)

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Complete one of the following emphases:

- Advanced Radiologic Sciences Emphasis (2FL)
- Complete 12 credit hours

Required Courses (12 credit hours)

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<td>3</td>
</tr>
</tbody>
</table>

Electives (select 25-33 credit hours)

Eelectives must courses have approval of a faculty advisor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RadTec 3123</td>
<td>2</td>
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<tr>
<td>RadTec 3143</td>
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<tr>
<td>RadTec 3243</td>
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<td>RadTec 3253</td>
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<td>RadTec 3263</td>
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<td>RadTec 3403</td>
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<td>RadTec SI3443</td>
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<td>RadTec 3463</td>
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<td>RadTec 3863</td>
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<td>RadTec 4213</td>
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<td>RadTec 4223</td>
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<td>RadTec 4233</td>
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<td>RadTec 4253</td>
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<td>RadTec 4303</td>
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<td>RadTec 4403</td>
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<td>RadTec 4543</td>
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<td>RadTec 4573</td>
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<td>RadTec 4803</td>
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<td>RadTec 4833</td>
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<tr>
<td>RadTec 4863</td>
<td>2</td>
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<tr>
<td>RadTec 4922</td>
<td>2</td>
</tr>
<tr>
<td>RadTec 4942</td>
<td>2</td>
</tr>
</tbody>
</table>

W E B E R  S T A T E  U N I V E R S I T Y  
2003-2004 C A T A L O G
• Magnetic Resonance Imaging (MRI) and/or Computed Tomography (CT) Emphasis

Prerequisite Courses (6 credit hours)
- RadTec 3243 Patient Care & Assessment II (3)
- RadTec 3403 Radiobiology and Health Physics (3)

Support Courses for CT and MRI (29-33 credit hours)
- RadTec 3043 Medical Ethics and Law (3)
- RadTec 3123 Sectional Anatomy (3)
- RadTec 3143 Imaging Pathophysiology (3)
- RadTec 3403 Radiobiology & Health Physics (3)
- RadTec 3253 Patient Care & Assessment III (3)
- RadTec 3463 Computerized Imaging (3)
- RadTec 3863 Clinical Internship (3)
- RadTec 4203 Patient Education in Radiology (3)
- RadTec 4303 Cardiology (3)
- RadTec 4863 Clinical Internship (2-6)

Magnetic Resonance Imaging (MRI) (2FT)
Required Courses (14 credit hours)
- RadTec 4603 MRI Physics and Instrumentation (3)
- RadTec 4623 Functional Imaging & Spectroscopy (3)
- RadTec 4633 MRI Imaging of the CNS (3)
- RadTec 4643 MRI Imaging of the Torso and Limbs (3)
- RadTec 4912 Comprehensive Review/MRI (2)

Computed Tomography (CT) (2FK)
Required Courses (11 credit hours)
- RadTec 4613 CT Imaging of the Torso and Limbs (3)
- RadTec 4653 CT Imaging of the CNS (3)
- RadTec 4663 CT Physics and Instrumentation (3)
- RadTec 4911 Comprehensive Review/CT (2)

• Cardiovascular-Interventional Technology (CIT) Emphasis (2FV)

Prerequisite Courses (6 credit hours)
- RadTec 3243 Patient Care & Assessment II (3)
- RadTec 3403 Radiobiology & Health Physics (3)

Required Courses (9 credit hours)
- RadTec 4313 Visceral, Pelvic and Extremity Angiography (3)
- RadTec 4333 Head and Neck Angiography (3)
- RadTec 4343 Thoracic and Venous Procedures (3)

Support Courses for CIT (32 credit hours)
- RadTec 3043 Medical Ethics and Law (3)
- RadTec 3123 Sectional Anatomy (3)
- RadTec 3143 Imaging Pathophysiology (3)
- RadTec 3253 Patient Care & Assessment III (3)
- RadTec 3263 Diagnostic Services Pharmacology II (3)
- RadTec 3463 Computerized Imaging (3)
- RadTec 3863 Clinical Internship (3)
- RadTec 4203 Patient Education in Radiology (3)
- RadTec 4303 Cardiology (3)
- RadTec 4863 Clinical Internship (3)
- RadTec 4913 Comprehensive Review/CIT (2)

• Mammography Emphasis (2FU)

Required Courses (15 credit hours)
- RadTec 4553 Breast Anatomy, Physiology and Pathology (3)
- RadTec 4563 Mammographic Positioning Imaging Techniques (3)
- RadTec 4572 Patient Education and Clinical Examination (2)
- RadTec 4583 Mammographic Equipment and Quality Assurance (3)
- RadTec 4861 Clinical Internship (2)
- RadTec 4862 Clinical Internship (2)

Support Courses (12 credit hours)
- RadTec DV3003 Psycho-Social Medicine (3)
- RadTec 3043 Medical Ethics and Law (3)
- RadTec 3423 Federal Regulations (3)
- RadTec 4203 Patient Education in Radiology (3)

Electives (7 credit hours)
- RadTec 4833 Directed Readings and Research (3)
- RadTec 4914 Comprehensive Review/M (2)
- RadTec 4992 Seminar (2)

• Radiology Practitioner Assistant Emphasis (2FM)

A minor emphasis is not required.

Prerequisites: Applicants must be an AART registered technologist, have a minimum of five years experience as a registered technologist in radiography and the consent of a radiologist.

Required Courses (45 credit hours)
- RadTec 5403 Evaluation/Osseous System (3)
- RadTec 5413 Evaluation/Chest (3)
- RadTec 5423 Evaluation/Abdomen & GI System (3)
- RadTec 5433 Evaluation/Genitourinary Systems (3)
- RadTec 5443 Clinical Pathways (3)
- RadTec 5453 Evaluation/CNS System & Facial Structures (3)
- RadTec 5463 Problem Patient Management (3)
- RadTec 5473 Invasive Imaging Procedures (3)
- RadTec 5861 Clinical Preceptorship (3)
- RadTec 5862 Clinical Preceptorship (3)
- RadTec 5863 Clinical Preceptorship (3)
- RadTec 5864 Clinical Preceptorship (3)
- RadTec 5865 Clinical Preceptorship (3)
- RadTec 5867 Competency Assessment/Residency (3)
- RadTec 5868 Final Competency Assessment (3)

Support Courses (33 credit hours)
- RadTec DV3003 Psycho-Social Medicine (3)
- RadTec 3043 Medical Ethics and Law (3)
- RadTec 3123 Sectional Anatomy (3)
- RadTec 3143 Imaging Pathophysiology (3)
- RadTec 3253 Patient Care & Assessment III (3)
- RadTec 3403 Radiobiology & Health Physics (3)
- RadTec 3423 Federal Regulations (3)
- RadTec 4203 Patient Education in Radiology (3)
- RadTec 4303 Cardiology (3)
- RadTec 4863 Clinical Internship (2-6)

Advanced Radiologic Sciences

MINOR EMPHASIS (2FS)

Grade Requirements: A GPA of 2.0 in all courses used toward the minor.

Credit Hour Requirements: 18-24 credit hours in Advanced Radiologic Sciences.

Courses required for certification cannot be used to fulfill minor requirements.

Course Requirements for Minor
An academic contract must be generated with a faculty advisor for a minimum of 18 credit hours from the RadTec upper division courses.

Radiography Courses - RadTec

RadTec 1022. Introduction to Radiologic Technology (2)
Program orientation, elementary radiation protection and basic darkroom procedures.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| RadTec 1303 | Principles of Radiographic Exposure I (3)  
Theory of x-ray production; image production and radiographic equipment. |
| RadTec 1502 | Radiographic Anatomy and Positioning I (2)  
Terminology, pathology and radiographic positioning. |
| RadTec 1512 | Radiographic Anatomy and Positioning II (2)  
Continuation of RadTec 1502. |
| RadTec 1522 | Radiographic Anatomy and Positioning III (2)  
Continuation of RadTec 1512. |
| RadTec 1532 | Radiographic Anatomy and Positioning IV (2)  
Continuation of RadTec 1522. |
| RadTec 1542 | Radiographic Anatomy and Positioning V (2)  
Continuation of RadTec 1532. |
| RadTec 1601 | Laboratory Experience (2)  
Patient positioning, darkroom experience and review of radiographic quality. |
| RadTec 1621 | Laboratory Experience (1)  
Continuation of RadTec 1601. |
| RadTec 1641 | Laboratory Experience (1)  
Continuation of RadTec 1621. |
| RadTec 1661 | Laboratory Experience (1)  
Continuation of RadTec 1641. |
| RadTec 1681 | Laboratory Experience (1)  
Continuation of RadTec 1661. |
| RadTec 2043 | Patient Care and Assessment I (2)  
Patient care and management in radiology. |
| RadTec 2272 | Basic Sectional Anatomy (2)  
The anatomical appearance of each organ system and common pathology on sectional medical images. |
| RadTec 2403 | Principles of Radiographic Exposure II (2)  
Radiographic imaging, instrumentation, image production and factors affecting radiologic quality. |
| RadTec 2803 | Independent Research (1-3)  
Individualized projects. |
| RadTec 2833 | Directed Readings and Research (1-3)  
Selected readings and/or a research project on medical imaging procedures. |
| RadTec 2861 | Clinical Education (2)  
Experience gained in a health care facility. |
| RadTec 2862 | Clinical Education (3)  
Continuation of RadTec 2861. |
| RadTec 2863 | Clinical Education (3)  
Continuation of RadTec 2862. |
| RadTec 2864 | Clinical Education (3)  
Continuation of RadTec 2863. |
| RadTec 2865 | Clinical Education (3)  
Continuation of RadTec 2864. |
| RadTec 2866 | Final Competency Evaluation (2)  
Demonstration of competency performing the procedures required by the certification agency. |
| RadTec 2913 | Comprehensive Review (2)  
Review of didactic and clinical applications. |
| RadTec 2921 | Workshop, Conferences and Telecourses (1-3) |
| RadTec 2942 | Career Planning and New Technology (2)  
Assistance with career planning and an introduction to specialized imaging procedures and new and future imaging procedures. |
| RadTec 2992 | Seminar (1-2)  
Patient case studies and critical care situations. |
| RadTec DV3003 | Psycho-Social Medicine (3)  
Prepared to design programs to better understand their patient and the patient's family through a program of patient care and management in radiology. |
| RadTec 3123 | Sectional Anatomy (3)  
Anatomical study of the body in the sagittal, transverse and coronal imaging planes. |
| RadTec 3143 | Imaging Pathophysiology (3)  
Imaging adaptations and alterations in anatomy and physiology with variation outside of the normal range. |
| RadTec 3243 | Patient Care and Assessment II (3)  
System analysis and advanced level of patient care, assessment and management in radiology. |
| RadTec 3253 | Patient Care and Assessment III (3)  
Intravenous therapy, patient care procedures and monitoring during imaging studies. |
| RadTec 3263 | Diagnostic Services Pharmacology II (3)  
Concepts of pharmacology including modes of action, uses, modes of excretion effects, side effects and patient care required for specific pharmacologic agents. |
| RadTec 3403 | Radiobiology & Health Physics (3)  
Effect of ionizing radiation on the human body, patient and personnel protection, exposure monitoring health physics and oncology. |
| RadTec 3423 | Federal Regulations (3)  
Regulations governing health care, equipment and application of ionizing radiation. |
| RadTec SJ3443 | Quality Assurance in Radiology (3)  
Development of a quality assurance program and manual to meet accreditation requirements. |
| RadTec 3463 | Computerized Imaging (3)  
Processing of digital images in specialized radiographic procedures, three dimensional imaging and computerized management practice. |
| RadTec 3863 | Clinical Internship (2-6)  
Experience in a radiology specialty area. Consent of instructor is required. |
| RadTec 4203 | Patient Education in Radiology (3)  
Skills necessary to assess, plan and evaluate a variety of educational programs specific to radiology patients. |
<table>
<thead>
<tr>
<th><strong>Course</strong></th>
<th><strong>Title</strong></th>
<th><strong>Credit Hours</strong></th>
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</thead>
<tbody>
<tr>
<td>RadTec 4213</td>
<td>Supervision and Staff Development</td>
<td>3</td>
</tr>
<tr>
<td>Federal regulations, developing department protocol, designing departments personnel supervision and quality of care assessment.</td>
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<tr>
<td>RadTec 4223</td>
<td>Promotional Strategies</td>
<td>3</td>
</tr>
<tr>
<td>Assessment of needs, development and implementation of promotional strategies for Radiology Departments.</td>
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<tr>
<td>RadTec 4233</td>
<td>Fiscal Analysis in Radiology</td>
<td>3</td>
</tr>
<tr>
<td>Justification, acquisition and leasing of imaging equipment and accessories, staffing formulas and review of maintenance contracts.</td>
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</tr>
<tr>
<td>RadTec 4243</td>
<td>Quality Management in Radiology</td>
<td>3</td>
</tr>
<tr>
<td>Concepts and principles of quality management, collection and analysis of data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RadTec 4253</td>
<td>Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>Study of management of risk associated with the delivery of health care in clinical and non-clinical settings.</td>
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<tr>
<td>RadTec 4303</td>
<td>Cardiology</td>
<td>3</td>
</tr>
<tr>
<td>Detailed study of the heart: anatomy, physiology, pathophysiology, pharmacology, EKGs and imaging modalities.</td>
<td></td>
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<tr>
<td>RadTec 4313</td>
<td>Visceral, Pelvic and Extremity Angiography</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy, pathology, protocols and interventional procedures of abdominal viscera, extremities and pelvis.</td>
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<tr>
<td>RadTec 4333</td>
<td>Head and Neck Angiography</td>
<td>3</td>
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<tr>
<td>Anatomy, pathology, protocols and interventional procedures of the aortic arch, brachiocephalic, thyroid and other facial and neck arteries.</td>
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<tr>
<td>RadTec 4343</td>
<td>Thoracic and Venous Procedures</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy, pathology, protocols and interventional procedures of the venous and cardiovascular systems.</td>
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<tr>
<td>RadTec 4403</td>
<td>Imaging Pathology</td>
<td>3</td>
</tr>
<tr>
<td>Radiographic presentation of pathological conditions, abnormalities and anomalies.</td>
<td></td>
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<tr>
<td>RadTec 4543</td>
<td>Bone Densitometry</td>
<td>3</td>
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<tr>
<td>This course comprehensively covers the methods of bone density measurement (bone densitometry, DEXA), the pathogenesis of osteoporosis, quality management issues, therapies for osteoporosis and a review of additional analysis methods.</td>
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<tr>
<td>RadTec 4553</td>
<td>Breast Anatomy, Physiology and Pathology</td>
<td>3</td>
</tr>
<tr>
<td>Normal breast anatomy and physiology compared to pathological conditions.</td>
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<tr>
<td>RadTec 4563</td>
<td>Mammographic Positioning/Imaging Techniques</td>
<td>3</td>
</tr>
<tr>
<td>Routine positions, risk versus benefit; tissue variations, specialized procedures and imaging modalities.</td>
<td></td>
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<tr>
<td>RadTec 4572</td>
<td>Patient Education and Clinical Examination</td>
<td>2</td>
</tr>
<tr>
<td>Breast disease and reconstruction methods, breast examination, rehabilitation, medical-legal considerations.</td>
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<tr>
<td>RadTec 4573</td>
<td>The Female Patient and Medical Imaging</td>
<td>3</td>
</tr>
<tr>
<td>This course will familiarize the student to disease processes specific to the female patient and the imaging methods that may be used in diagnosis and treatment. The clinical pathways that are commonly used, involving all radiologic imaging modalities, will be explored. Students who enroll in this course must be certified by the American Registry of Radiologic Technologists.</td>
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<tr>
<td>RadTec 4583</td>
<td>Mammographic Equipment and Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>Equipment operation, technical factors and quality assurance procedures in mammography.</td>
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<tr>
<td>RadTec 4603</td>
<td>Magnetic Resonance Imaging Physics and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>Physical principles and theories of magnetic resonance, instrumentation, imaging sequences and methods in normal and abnormal tissue, and computer parameters of magnetic resonance.</td>
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</tr>
<tr>
<td>RadTec 4613</td>
<td>Computed Tomography of the Torso and Limbs</td>
<td>3</td>
</tr>
<tr>
<td>Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and extremities.</td>
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<tr>
<td>RadTec 4623</td>
<td>Functional Magnetic Resonance Imaging and Spectroscopy</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation of organ function and diagnosis of disease process using in vivo chemical shifts.</td>
<td></td>
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<tr>
<td>RadTec 4633</td>
<td>Magnetic Resonance Imaging of the Central Nervous System</td>
<td>3</td>
</tr>
<tr>
<td>Sectional anatomy, pathology and imaging protocol of the head, spine, and central nervous system.</td>
<td></td>
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</tr>
<tr>
<td>RadTec 4643</td>
<td>Magnetic Resonance of the Torso and Limbs</td>
<td>3</td>
</tr>
<tr>
<td>Sectional anatomy, pathology and imaging protocols of the abdominal viscera, pelvis, thorax and extremities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RadTec 4653</td>
<td>Computed Tomography of the Central Nervous System</td>
<td>3</td>
</tr>
<tr>
<td>Sectional anatomy, pathology and imaging protocols of the head, spine and central nervous system.</td>
<td></td>
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<tr>
<td>RadTec 4663</td>
<td>Computed Tomography Physics and Instrumentations</td>
<td>3</td>
</tr>
<tr>
<td>Interactions of electromagnetic waves, instrumentation, imaging sequences and computer parameters of computerized tomography imaging.</td>
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<tr>
<td>RadTec 4803</td>
<td>Individual Research</td>
<td>1-3</td>
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<tr>
<td>Research projects developed for district, state, regional or national presentation.</td>
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<tr>
<td>RadTec 4833</td>
<td>Directed Readings and Research</td>
<td>3</td>
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<tr>
<td>Synthesis and analysis of journal articles resulting in a research paper for the purpose of publication.</td>
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<tr>
<td>RadTec 4861</td>
<td>Clinical Internship</td>
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</tr>
<tr>
<td>Experience in a radiology specialty area. Consent of instructor is needed.</td>
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<tr>
<td>RadTec 4862</td>
<td>Clinical Internship</td>
<td>2</td>
</tr>
<tr>
<td>Experience in a radiology specialty area. Consent of instructor is needed.</td>
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<tr>
<td>RadTec 4863</td>
<td>Clinical Internship</td>
<td>2-4</td>
</tr>
<tr>
<td>Experience in a radiology specialty area. Consent of instructor is needed.</td>
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<tr>
<td>RadTec 4911</td>
<td>Comprehensive Review/CT</td>
<td>2</td>
</tr>
<tr>
<td>Preparation for advanced certification examination.</td>
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<tr>
<td>RadTec 4912</td>
<td>Comprehensive Review/MRI</td>
<td>2</td>
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<tr>
<td>Preparation for advanced certification examination.</td>
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<tr>
<td>RadTec 4913</td>
<td>Comprehensive Review/CIT</td>
<td>2</td>
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<tr>
<td>Preparation for advanced certification examination.</td>
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<tr>
<td>RadTec 4914</td>
<td>Comprehensive Review/M</td>
<td>2</td>
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<tr>
<td>Preparation for advanced certification examination.</td>
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</tbody>
</table>
RadTec 4915. Comprehensive Review/QM (2)
Preparation for advanced certification examination.

RadTec 4922. Workshop, Conferences and Telecourses (2)

RadTec 4933. Research Methods (2)
The formulation of a hypothesis, study of quantitative research methods, the testing of theories through analytical or statistical inquiry and the preparation of a manuscript.

RadTec 4942. Current Issues and Trends (2)
Current issues and trends in the health care industry and environment affecting radiology.

RadTec 54943. Baccalaureate Thesis (3)
Research in the health professions utilizing the scientific inquiry method.

RadTec 4992. Seminar (2)
New developments and procedures in imaging and therapy and preparing for the future.

RadTec 5403. Evaluation of the Osseous System (3)
Imaging evaluation of pathological conditions, abnormalities and anomalies of the osseous system.

RadTec 5413. Evaluation of the Chest (3)
Imaging evaluation of pathological conditions, abnormalities and anomalies of the chest.

RadTec 5423. Evaluation of the Abdomen and G I System (3)
Imaging evaluation of pathological conditions, abnormalities and anomalies of the abdomen and gastrointestinal system.

RadTec 5433. Evaluation of the Genitourinary System (3)
Imaging evaluation of pathological conditions, abnormalities and anomalies of the genitourinary system.

RadTec 5443. Clinical Pathways (3)
Studying clinical pathways for patients based on disease processes and trauma. Prerequisites: RadTec 5403 and RadTec 5413.

RadTec 5453. Evaluation/CNS and Facial Structures (3)
Imaging evaluation of pathological conditions, abnormalities and anomalies of the central nervous system and facial structures.

RadTec 5463. Problem Patient Management (3)
Determination of pathological conditions utilizing problem-solving case studies.

RadTec 5473. Invasive Imaging Procedures (3)
Patient preparation and performance of medical imaging invasive procedures.

RadTec 5861. Clinical Preceptorship (3)
Experience in a radiology department. Consent of instructor needed.

RadTec 5862. Clinical Preceptorship (3)
Continuation of RadTec 5861.

RadTec 5863. Clinical Preceptorship (3)
Continuation of RadTec 5862.

RadTec 5864. Clinical Preceptorship (3)
Continuation of RadTec 5863.

RadTec 5865. Clinical Preceptorship (3)
Continuation of RadTec 5864.

RadTec 5867. Competency Assessment/Residency (3)
Assessment of competency knowledge and skills in the clinical setting.

RadTec 5868. Final Competency Assessment (3)
Review and evaluation of student competencies.

DIAGNOSTIC MEDICAL SONOGRAPHY

The Diagnostic Medical Sonography program is designed as an advanced discipline of study for two-year graduates of radiography programs or equivalent as determined by the Department of Radiologic Sciences. A student can complete the required courses and be eligible to sit for the national certification examination. The courses offered in Diagnostic Medical Sonography are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program and support courses are four (4) semesters in length. A competency-based evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. The clinical education courses require a minimum of 24 clock hours per calendar week in an affiliated health care facility.

BACHELOR DEGREE (B.S.)

To obtain a baccalaureate degree, the student must complete the WSU General Education requirements; a major and a minor emphasis; a quality assurance course; and RadTec 54943, Baccalaureate Thesis (3), or equivalent.

DIAGNOSTIC MEDICAL SONOGRAPHY
CERTIFICATE

Program Prerequisite: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).

Grade Requirements: After admittance to the program, a GPA of 2.0 or a grade of "C" is required in all professional courses.

Credit Hour Requirements: Credit hours required will vary according to the chosen emphasis. Consult with a faculty member to complete an academic contract.

Advisement:
Students should meet with the admissions counselor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment.

Admission Requirements:
To be eligible for admission to the Diagnostic Medical Sonography program, the following criteria must be met:
1. Application must be made to Weber State.
2. Demonstrate ability to achieve scholastically.
3. Complete an application to the desired program and pay the $20 application fee.
4. Provide the following with the application
   a. transcripts from hospital certificate program or colleges and universities;
   b. high school transcripts if no previous college experience and copy of ARRT certification or equivalent.
5. Have all pertinent material on file January 10.
6. Have major specified as Diagnostic Medical Sonography.
Course Requirements for Program Certificate

Biomedical Core Courses Required

HthSci LS1110 Health Sciences (4)
HthSci 1111 Health Sciences (4)

or the following acceptable equivalent
Life Science (3)

Prerequisite Requirements

RadTec 3243 Patient Care & Assessment II (3)
RadTec 3463 Computerized Imaging (3)

DMS Courses Required

A Diagnostic Medical Sonography elective must be selected by the student from one of the following:
DMS 4103 Physics & Instrumentation (3)
DMS 4143 Quality Assurance (3)

Emphasis Requirements

Complete the courses for one of the following two emphasis areas: Medical Emphasis (22 credit hours) or Cardiac Emphasis (18 credit hours).

• Medical Emphasis (2FA)
  DMS 4303 Abdominal Sonography (3)
  DMS 4323 Superficial Structure & Special Studies (1)
  DMS 4343 Obstetric & Gynecologic Sonography (3)
  DMS 4403 Vascular Sonography (2)
  DMS 4641 Laboratory Scanning Experience I (1)
  DMS 4642 Laboratory Scanning Experience II (1)
  DMS 4643 Laboratory Scanning Experience III (1)
  DMS 4861 Clinical Education I (3)
  DMS 4862 Clinical Education II (3)
  DMS 4863 Clinical Education III (3)
  DMS 4911 Comprehensive Review I (2)

• Cardiac Emphasis (2FC)
  DMS 4503 Cardiac Sonography I (3)
  DMS 4523 Cardiac Sonography II (3)
  DMS 4644 Laboratory Scanning Experience IV (1)
  DMS 4645 Laboratory Scanning Experience V (1)
  DMS 4865 Clinical Education V (3)
  DMS 4866 Clinical Education VI (3)
  DMS 4867 Clinical Education VII (3)
  DMS 4912 Comprehensive Review II (1)

Support Courses Required for

Medical or Cardiac Emphasis (12 credit hours)

RadTec 3043 Medical Ethics & Law (3)
RadTec 3123 Sectional Anatomy (3)
RadTec 3143 Imaging Pathophysiology (3)
RadTec 3253 Patient Care & Assessment III (3)

Support Course Required for Cardiac Emphasis

RadTec 4303 Cardiology (3)

Electives

DMS 4864 Clinical Education IV/Vascular (3)
DMS 4801 Individualized Research (1-3)
DMS 4921 Workshops, Conferences & Telecourses (1-3)

DMS SI4143. Quality Assurance (3)
Developing, analyzing and evaluating a quality assurance program.

DMS 4303. Abdominal Sonography (3)
Concepts in abdominal intraperitoneal and retroperitoneal sonographic scanning technique and protocol to produce and evaluate diagnostic images in the clinical setting.

DMS 4323. Superficial Structure & Special Studies (1)
Concepts in superficial structure sonographic scanning technique and protocol to produce and evaluate diagnostic images in the clinical setting.

DMS 4343. Obstetric and Gynecologic Sonography (3)
Concepts in superficial structures, neonatal brain and spine obstetric and gynecologic sonographic scanning technique and protocol to produce and evaluate diagnostic images, and to assist in biopsy and aspiration procedures.

DMS 4403. Vascular Sonography (2)
Concepts in vascular sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4503. Cardiac Sonography I (3)
Concepts in cardiac sonographic scanning technique and protocol to produce and evaluate diagnostic images.

DMS 4523. Cardiac Sonography II (3)
Continuation of DMS 4503.

DMS 4641. Laboratory Scanning Experience I (1)
Patient position and instruction, transducer selection and anatomic placement, scanning protocol, and image quality are practiced and reviewed for medical and vascular sonographic examinations.

DMS 4642. Laboratory Scanning Experience II (1)
Continuation of DMS 4641.

DMS 4643. Laboratory Scanning Experience III (1)
Continuation of DMS 4642.

DMS 4644. Laboratory Scanning Experience IV (1)
Patient position and instruction, transducer selection and anatomic placement, scanning protocol, and image quality are practiced and reviewed for cardiac sonographic examinations.

DMS 4645. Laboratory Scanning Experience V (1)
Continuation of DMS 4644.

DMS 4801. Individualized Research (1-3)
Contract with faculty advisor required.

DMS 4861. Clinical Education I (3)
A minimum of 24 hours per week in an active diagnostic medical/vascular sonography department.

DMS 4862. Clinical Education II (3)
Continuation of DMS 4861.

DMS 4863. Clinical Education III (3)
Continuation of DMS 4862.

DMS 4864. Clinical Education IV/Vascular (3)
Contract required to gain additional vascular clinical competencies.

DMS 4865. Clinical Education V (3)
A minimum of 24 hours per week in an active diagnostic cardiac sonography department.

DMS 4866. Clinical Education VI (3)
Continuation of DMS 4865.

DMS 4867. Clinical Education VII (3)
Continuation of DMS 4866.
DMS 4911. Comprehensive Review I (1-2)
Review and requirements for advanced responsibilities of the medical sonographer (1 cr. hr.) and vascular sonographer (1 cr. hr.).

DMS 4912. Comprehensive Review II (1)
Review and requirements for advanced responsibilities of the cardiac sonographer.

DMS 4921. Workshops, Conferences and Telecourses (1-3)

NUCLEAR MEDICINE

The Nuclear Medicine program is designed as an advanced discipline of study for ARRT registered technologists or the acceptable equivalent. A student can complete the required courses, obtain a certificate of completion, and be eligible to sit for the national certification examination. The courses offered in the Nuclear Medicine program are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program is three (3) full semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

BACHELOR DEGREE (B.S.)

To obtain a baccalaureate degree, the student must complete the WSU General Education requirements; a major; and a minor emphasis; a quality assurance course; and RadTec SI4943, Baccalaureate Thesis (3), or equivalent.

NUCLEAR MEDICINE

CERTIFICATE

Program Prerequisites: Must be an ARRT registered technologist or acceptable equivalent as determined by the Department of Radiologic Sciences, make application and be accepted to the program of choice (refer to the Admission Requirements below).

Grade Requirements: After admittance to the program, a GPA of 2.0 is required in all professional courses.

Credit Hour Requirements: A total of 29 credit hours in didactic courses and clinical education are required. The support courses or the equivalent must be completed to obtain the degree.

Advisement

Students should meet with a faculty advisor at least annually for course and program review. Call 801-626-6057 for more information or to schedule an appointment.

Admission Process

To be eligible for admission to the Nuclear Medicine program, the following criteria must be met:
1. Application and admission to Weber State University.
2. Demonstrate ability to achieve scholastically.
3. Complete an application to the desired program and pay the $20 application fee.
4. Provide the following with the application:
   a. transcripts from hospital certificate programs or colleges and universities;
   b. high school transcripts, if no previous college experience; and
   c. copy of ARRT certification or equivalent.
5. Have all pertinent material on file by January 10.
6. Have major specified as Nuclear Medicine (2FB).

Course Requirements for Certificate

Prerequisite Courses:
- RadTec 3043 Medical Ethics and Law (3)
- RadTec 3243 Patient Care & Assessment II (3)
- RadTec 3263 Diagnostic Services Pharmacology II (3)
- RadTec 3403 Radiobiology & Health Physics (3)
- RadTec 3463 Computerized Imaging (3)

Nuclear Medicine Courses Required (29 credit hours):
- NucMed 4013 Radiopharmaceuticals & Dosages (3)
- NucMed 4203 Scanning & Imaging Procedures I (3)
- NucMed 4213 Scanning & Imaging Procedures II (3)
- NucMed 4223 Nuclear Cardiology (3)
- NucMed 4303 Radionuclide Physics & Instrumentation (3)
- NucMed S44333 Quality Assurance (3)
- NucMed 4861 Clinical Education (3)
- NucMed 4912 Comprehensive Review (2)

Support Courses (12 credit hours):
- RadTec 3123 Sectional Anatomy (3)
- RadTec 3143 Imaging Pathophysiology (3)
- RadTec 3423 Federal Regulations (3)
- RadTec 4303 Cardiology (3)

Elective
- NucMed 4991 Seminar (1)

NUCLEAR MEDICINE COURSES - NUCMED

NucMed 4103. Radiopharmaceuticals and Dosages (3)
Radiopharmacology, characterization of radiopharmaceuticals used in performing examinations and calculation of dosages.

NucMed 4203. Scanning and Imaging Procedures I (3)
Organ concentration, excretion and absorption, measurements and imaging.

NucMed 4213. Scanning and Imaging Procedures II (3)
Organ concentration, excretion and absorption, measurements and imaging.

NucMed 4223. Nuclear Cardiology (3)
Pathology, indications for examination and procedures in nuclear cardiology.

NucMed 4303. Radionuclide Physics & Instrumentation (3)
Production and properties of radionuclides, decay schemes, radiation measurements and special characteristics of radiopharmaceuticals.

NucMed S44333. Quality Assurance (3)
Nuclear Medicine departmental policies and procedures.

NucMed 4861. Clinical Education (3)
A minimum of 24 hours per week in an active Nuclear Medicine department.

NucMed 4862. Clinical Education (3)
A minimum of 24 hours per week in an active Nuclear Medicine department.

NucMed 4863. Clinical Education (3)
A minimum of 24 hours per week in an active Nuclear Medicine department.
The Radiation Therapy program is designed as an advanced discipline of study for graduates of accredited programs. A student can complete the required courses, obtain a certificate of completion, and be eligible to sit for the national certification examination. The courses offered in the Radiation Therapy program are upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program is three (3) full semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

To obtain a baccalaureate degree, the student must complete the WSU General Education requirements, a major and a minor emphasis, a quality assurance course, and RadTec S4943, Baccalaureate Thesis (3), or equivalent.

The Radiation Therapy program is upper-division and will be accepted as satisfying the requirements for a primary area emphasis for those students who have been accepted into the Bachelor of Science program.

The program is three (3) full semesters in length, which requires the student to attend in the summer. A competency-based clinical evaluation system is utilized throughout the program. A student must achieve a predetermined level of competency in the academic and clinical courses in order to receive grades for the course. A minimum of 24 clock hours per week of clinical education must be completed in an affiliated health care facility.

To obtain a baccalaureate degree, the student must complete the WSU General Education requirements, a major and a minor emphasis, a quality assurance course, and RadTec S4943, Baccalaureate Thesis (3), or equivalent.

RADIATION THERAPY COURSES - RADTHR

Radicrthr 4330. Radiation Therapy Physics (3)

RadThr 4342. Introduction to Treatment Planning (3)
Basic quantities and concepts in radiotherapeutic dosimetry. Current aspects of the anatomical and physical consideration involved in planning and delivery of the therapy prescription.

RadThr 4410. Radiation Oncology I (3)
Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques, and case studies.

RadThr 4412. Radiation Oncology II (3)
Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques, and case studies.

RadThr 4414. Radiation Oncology III (3)
Pathology of cancer; combined therapy and surgery; chemotherapy and radiation therapy; clinical application of treatment techniques, and case studies.

RadThr 4425. Oncology Patient Care & Education (3)
Supportive care of the cancer patient with emphasis on nutritional therapy, use of blood and blood products, management of cancer pain, infections, and adverse effects of treatment. Meeting the physical and psychological needs of the curative and terminal patient will be addressed. Methods of educating the oncology patient will be addressed.

RadThr 4444. Advanced Treatment Planning/Brachytherapy (3)
Prescription interpretation, nuclide implants, brachytherapy and treatment techniques involving hyperthermia. Beam modification devices and theory of beam placement will be discussed.
RadThr 48446. Quality Assurance (3)
Establishment of a quality assurance program for linear accelerators, simulators and therapeutic isotopes.

RadThr 4861. Clinical Education I (3)
Clinical education designed to facilitate transfer of didactic instruction to practical clinical practice.

RadThr 4862. Clinical Education II (3)
Clinical education designed to facilitate transfer of didactic instruction to practical clinical practice.

RadThr 4863. Clinical Education III (3)
Clinical education designed to facilitate transfer of didactic instruction to practical clinical practice.

RadThr 4913. Comprehensive Review (3)
Review of all didactic and clinical courses and competencies. Guest lecturer and multiple mock registry examinations will be presented.

Program Director: Ms. Georgine Bills
Clinical Coordinator: Valerie Aston
Medical Director: Gary K. Goucher, MD
Location: Marriott Allied Health Building, Rm 309
Telephone Contact: Shannon Gutierrez 801-626-7071
Professor: Georgine Bills; Associate Professor: Paul Eberle,
Assistant Professor: Gary Goucher; Instructors: Valerie Aston, Mich Oki, Randy Parker

Respiratory care professionals are actively involved, as members of the health care team, in the diagnosis, treatment, management, education, and long-term care of patients with cardiopulmonary problems. These patients may be in the newborn nursery, surgical/medical/rehabilitation units, outpatient clinics, Emergency Room, or cardiac/shock-trauma/burn/ neurologic intensive care units. Respiratory Care Practitioners (RCPs) are employed in both acute and long-term care hospitals, skilled nursing facilities, and home health agencies.

Licensed RCPs perform therapeutic and diagnostic procedures under the direction of a physician. Respiratory care practitioners are competent in basic patient care and assessment, medical gas administration, aerosol and humidity therapy, medication administration, hyperinflation techniques, bronchopulmonary drainage and percussion, mechanical ventilation, airway management, advanced cardiac life support, pulmonary function studies, and blood gas sampling and analysis. Patient education, smoking cessation/nicotine intervention, and health promotion are also included in the RCP scope of practice.

The respiratory therapy program follows a career-ladder approach from the entry-level through a Bachelor of Science degree.

Program Prerequisites
Completion of A.S. degree in respiratory therapy or Certificate of Completion from an accredited, advanced respiratory therapist program (R.R.T. eligible).

Grade Requirements
A grade of "C" or better in each course required by this program (a "C-" is not acceptable.) CR/NC

Career Ladder
BACHELOR DEGREE (B.S.)

Respiratory Therapy Courses Required
Complete the requirements for the A.S. degree, which requires 61 credit hours, including 25 upper division ResThy credit hours. Students entering the B.S. program with a Certificate of Completion in lieu of the A.S. degree must satisfy the following courses [or equivalent]:

- ResThy 3210 Adv Cardiopulmonary Anat/Phys (2)
- ResThy 3220 Adv Cardiopulmonary Patho (2)
- ResThy 3230 Adv Cardiopulmonary Tech (2)
- ResThy 3260 Neonatal & Pediatric Resp Care (2)
- ResThy 3270 Adult Critical Care (2)
- ResThy 3280 Patient Care Cont/Qual Mgmt (3)
- ResThy 3760 Neonatal & Ped Resp Care/ Clinical (4)
- ResThy 3770 Adult Critical Care/ Clinical (4)
- ResThy 3780 Clinical Applications (2)
- ResThy SI3900 Clinical Simulation Seminar (2)

Additional Required Courses
All students must complete an additional five (5) upper division credit hours in Seminars, Independent Projects and Directed Readings. Departmental standards are developed which specify content of certain courses in this program require a "C" or better to receive CR a minimum cumulative GPA of 2.75 is required for graduation.

Credit Hour Requirements
A total of 120 credits is required for graduation (includes A.S. degree requirements) - 67 of these are ResThy credits. A total of 40 upper division credit hours is required (courses numbered 3000 and above) - 30 of these are ResThy credits. Departmental standards are applied to independent projects and directed readings.

Admission Requirements
Declare your program of study (see page 18). Complete A.S. degree requirements (or provide Certificate of Completion from an accredited, advanced respiratory therapist program). Meet with faculty advisor and establish an academic contract.

General Education
Refer to pages 36-41 for Bachelor of Science requirements. Of the Quantitative Literacy courses (Math QL1030, QL1040, or QL1050), Math QL1030 Contemporary Mathematics is the preferred course for program completion. The following general education courses will fulfill both general education and program requirements: Psych SS1010 or Psych SS2200, Engl EN1010, Comm HU1050 or Comm HU1020, and either HthSci 1110/1111 or introductory-level courses in some of the basic sciences (human biology, chemistry and microbiology).

Consult with department advisor or Dr. Ezekiel R. Dumke College of Health Professions Admission Advisor regarding general education guidelines.

Course Requirements for B.S. Degree
Respiratory Therapy Courses Required
Complete the requirements for the A.S. degree, which requires 61 credit hours, including 25 upper division ResThy credit hours. Students entering the B.S. program with a Certificate of Completion in lieu of the A.S. degree must satisfy the following courses [or equivalent]:

- ResThy 3210 Adv Cardiopulmonary Anat/Phys (2)
- ResThy 3220 Adv Cardiopulmonary Patho (2)
- ResThy 3230 Adv Cardiopulmonary Tech (2)
- ResThy 3260 Neonatal & Pediatric Resp Care (2)
- ResThy 3270 Adult Critical Care (2)
- ResThy 3280 Patient Care Cont/Qual Mgmt (3)
- ResThy 3760 Neonatal & Ped Resp Care/Clinical (4)
- ResThy 3770 Adult Critical Care/Clinical (4)
- ResThy 3780 Clinical Applications (2)
- ResThy SI3900 Clinical Simulation Seminar (2)

Additional Required Courses
All students must complete an additional five (5) upper division credit hours in Seminars, Independent Projects and Directed Readings. Departmental standards are developed which specify content of certain
**Respiratory Therapy**

**MINOR/B.I.S. CONCENTRATION**

- **Grade Requirements**: A grade of "C" or better in each course required by this program (a "C-" is not acceptable.) CR/NC courses in this program require a "C" or better to receive CR. A minimum cumulative GPA of 2.75 is required for graduation.

- **Credit Hour Requirements**: A minimum of 18 credit hours is required by this program (a "C-" is not acceptable.) CR/NC courses in this program require a "C" or better to receive CR. A minimum cumulative GPA of 2.75 is required for graduation.

**Course Requirements for Minor/B.I.S. Concentration**

Select 18 credit hours of upper division ResThy courses, are required. Respiratory Therapy is an approved minor for the following bachelor degrees: Health Services Administration; Health Education, Training, and Promotion; Long-Term Care Administration; Technical Sales. Respiratory Therapy may also be used as an area of concentration for the B.I.S. degree. Refer to the Interdisciplinary Studies section of this catalog for B.I.S. degree requirements.

**ENTRY-LEVEL RESPIRATORY THERAPIST**

**ASSOCIATE OF APPLIED SCIENCE (A.A.S.)**

- **Program Prerequisites**: Completion of all prerequisite courses with a grade of "C" or better ("C-" or CR are not acceptable in prerequisite courses.) In addition, students must complete an application/selection process, which requires prior completion of ResThy 1400 or current CPR certification at the BLS-C level (also see Admissions Requirements below).

- **Grade Requirements**: A grade of "C" or better in each course required by this program (a "C-" is not acceptable.) CR/NC courses in this program require a "C" or better to receive CR.

- **Credit Hour Requirements**: A total of 60-67 credit hours is required for graduation. 38 of these are required ResThy courses and 18 are required general education courses.

**Advisement**

All respiratory therapy students are required to meet with a faculty advisor before applying for the program. Students are informed regarding program costs, structure, and academic and performance standards. Call 801-626-7071 for more information or to schedule an appointment.

During June, July and August, students may contact a counselor in the Dr. Ezekiel R. Dumke College of Health Professions' Admission & Promotion Committee interview. Complete all prerequisite courses with a "C" (2.0) or better.

**Admissions Requirements**

Declare your program of study (see page 18). Meet with a respiratory therapy faculty advisor (initial interview) and then file a Program Application (at the Dr. Ezekiel R. Dumke College of Health Professions Admissions Office, MHS 108 on or before February 1).

**Prerequisite Courses**

- ResThy 1540 Survey of Respiratory Therapy (1)
- Math 0960 First Course in Algebra (3)
- or 19 or above on the A.C.T.
- Engl EN1010 Intro to Writing (3)
- or Comm HU1050 Intro to Interpersonal & Small Group Communication (3)
- or Comm HU1020 Principles of Public Speaking (3)
- Psych SS1010 Introductory Psychology (3)
- or Psych SS2000 Interpersonal Relationships (3)
- HthSci 2230 Introductory Pathophysiology (3)
- or Micro LS1153 Elementary Public Health (3)
- Resthy 1560 or C.N.A. certificate

**General Education**

Refer to pages 36-41 for Associate of Applied Science requirements. The following general education courses will fulfill both general education and program requirements: Psych SS1010 or Psych SS2000, Engl EN1010, Comm HU1050 or Comm HU1020, and either HthSci 1110/1111 or introductory-level courses in the three basic sciences: Chem PS1010 Intro to Chemistry (3)
- or Psych SS2000, Engl EN1010, Comm HU1050 or Comm HU1020, and either HthSci 1110/1111 or introductory-level courses in the three basic sciences: Chem PS1010 Intro to Chemistry (3)
- or Micro LS1113 Introductory Microbiology (3)
- or Zool* 2200 Human Physiology (4)

*Zool LS1020 Human Biology (3) may be substituted for Human Physiology.

**Course Requirements for A.A.S. Degree**

**Respiratory Therapy Courses Required (38 credit hours)**

- ResThy 1540 Survey of Respiratory Therapy (1)
- ResThy 1560 Multi-Skilled Health Care Worker (1)
- ResThy 2140 Basic Therapeutic Modalities Lab (3)
- ResThy 2160 Equipment Management Lab (3)
- ResThy 2210 Elem Cardiopulmonary Anat/Phys (3)
- ResThy 2230 Elem Cardiopulmonary Patho (2)
- ResThy 2250 Basic Patient Assessment (2)
- ResThy 2270 Appl of Cardiopulmonary Diagnostics (4)
- ResThy 2300 Basic Modalities in Respiratory Care, I (3)
- ResThy 2310 Basic Modalities in Respiratory Care, II (3)
- ResThy 2320 Mechanical Ventilation (2)
- ResThy 2330 Comprehensive Review (1)
- ResThy 2520 Principles of Pharmacology (2)
- ResThy 2700 Clinical Applications (4)
- ResThy 2710 Specialty Clinical Experiences (1)
- ResThy 2720 Clinical Applications (3)

**Suggested Course Sequence**

Please refer to this program in the on-line catalog (weber.edu/catalog) and/or contact the department for a suggested course sequence.
ADVANCED RESPIRATORY THERAPIST
ASSOCIATE OF SCIENCE (A.S.)

- Program Prerequisites: Must be N.B.R.C. certified as a Certified Respiratory Therapist (C.R.T.).

- Grade Requirements: A grade of "C" or better in each course is required by this program (a "C-" is not acceptable.) CR/NC courses in this program require a "C" or better to receive CR. A minimum cumulative GPA of 2.75 is required for graduation.

- Credit Hour Requirements: A total of 61 credit hours is required for graduation – 25 of these must be upper division ResThy courses.

Advisement
All respiratory therapy students are required to meet with a faculty advisor before applying for program. Students are informed regarding program costs, structure, and academic and performance standards. Call 801-626-7071 for more information or to schedule an appointment.

During June, July and August, students may contact a counselor in the Dr. Ezekiel R. Dumke College of Health Professions’ Admission & Counseling Office (Marriott Allied Health Building Room 108, Phone 801-626-6028) for program information and an application, if a faculty member of the Respiratory Therapy Program is not available.

Admissions Requirements
Declare your program of study (see page 18) and provide proof of N.B.R.C. certification as a Certified Respiratory Therapist (C.R.T.). Meet with a faculty advisor and then file a Program Application (at the Respiratory Therapy Office, MHS 309 on or before March 15). Program selection criteria include cumulative GPA and clinical performance. Selection into the advanced therapist program is prioritized as follows: 1) continuing WSU entry-level respiratory therapist graduates; 2) returning WSU entry-level respiratory therapist graduates; and 3) transferring entry-level respiratory therapist graduates.

General Education
Refer to pages 36-41 for Associate of Science requirements. Of the Quantitative Literacy courses (Math QL1030, QL1040, or QL1050; Math QL1030 Contemporary Mathematics is the preferred course for this program).

Consult with a program advisor or Dr. Ezekiel R. Dumke College of Health Professions Admission Advisor regarding general education guidelines.

Course Requirements for A.S. Degree
Respiratory Therapy Courses Required (25 credit hours)

ResThy 3210 Advanced Cardiopulmonary Anatomy & Physiology (2)
ResThy 3220 Advanced Cardiopulmonary Pathophysiology (2)
ResThy 3230 Advanced Cardiopulmonary Tech (2)
ResThy 3260 Neonatal & Pediatric Respiratory Care (2)
ResThy 3270 Adult Critical Care (2)
ResThy 3280 Patient Care Continuum / Quality Management (3)
ResThy 3760 Neonatal & Pediatric Respiratory Care/ Clinical (4)
ResThy 3770 Adult Critical Care/Clinical (4)
ResThy 3780 Clinical Applications (2)
ResThy SJ3900 Clinical Simulation Seminar (2)

Suggested Course Sequence
Please refer to this program in the on-line catalog (weber.edu/catalog) and/or contact the department for a suggested course sequence.

RESPIRATORY THERAPY COURSES - RESTHY

ResThy 1540. Survey of Respiratory Therapy (1) F, S
This course is designed to introduce allied health and other students to the profession of respiratory therapy. It includes field trips, group discussions, lecture/demotions and limited lab activities. Open to all students.

ResThy 1560. Multi-Skilled Health Care Worker (1)
This course prepares students from different health care disciplines to understand the hospital environment, patient needs, and perform basic skills of patient care. Topics include the patient’s right to privacy, confidentiality, ethical, legal, and cultural issues, documentation, teamwork, concerns of medical terminology, and death and dying. Patient skills include vital signs, oxygen administration, specimen collection, personal care and cleanliness, environmental cleanliness, nutrition and diet, elimination, positioning and ambulating, patient safety and comfort, and OSHA guidelines for healthcare worker safety.

ResThy 2140. Introduction to Basic Therapeutic Modalities Lab (3) F
Introductory Laboratory course emphasizing basic patient interaction and assessment skills. Includes infection control skills, the administration of medical gases, humidity and aerosol, pharmacologic agents, hyperinflation therapy, airway clearance techniques and methods of care, and artificial ventilation.

ResThy 2160. Equipment Management Lab (3) S
Laboratory course emphasizing patient assessment skills relating to ventilation techniques and equipment. Includes equipment used by the respiratory care practitioner in initiating, troubleshooting, monitoring, and weaning from mechanical ventilation.

ResThy 2210. Elementary Cardiopulmonary Anatomy and Physiology (3) F
Cardiopulmonary anatomy and physiology specifically for the entry-level respiratory care practitioner. Includes physics of respiration, oxygen and carbon dioxide transport, and control of ventilation.

ResThy 2230. Cardiopulmonary Pathophysiology (2) F
A synopsis of medical and surgical cardiopulmonary disorders for the entry-level practitioner. Etiology, symptomatology, pathology, diagnosis, treatment, and prognosis of these disorders are presented.

ResThy 2250. Basic Patient Assessment (2) S
A basic orientation to patient assessment techniques used to obtain a patient medical history and physical examination. Discussion of pulmonary disease integrates assessment information with laboratory and radiographic data.

ResThy 2270. Application of Cardiopulmonary Diagnostics (4) S
Introduction to theory and clinical application of basic cardiopulmonary diagnostic studies, including simple spirometry, arterial and mixed venous blood gases, and electrocardiograms. Course emphasizes critical thinking skills in the application of diagnostic findings and utilizes case studies, class discussions, and extensive study guides.

ResThy 2300. Basic Modalities in Respiratory Care I (3) F
Theory and clinical application of basic therapies. Course includes indications, complications, hazards, equipment needed, side effects, and assessment for medical gases, humidity, aerosols, airway clearance, hyperinflation therapy, and pharmacologic agents. Course emphasizes patient assessment and critical thinking skills. Concurrent enrollment in Resthy 2140.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ResThy 2310</td>
<td>Basic Modalities in Respiratory Care II (3) F</td>
</tr>
<tr>
<td></td>
<td>Theory and clinical applications of airway management and artificial ventilation, including IPPB and introduction to modes of mechanical ventilation. Also includes the theory of invasive and non-invasive monitoring technology, and equipment decontamination.</td>
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<tr>
<td>ResThy 2320</td>
<td>Essentials of Mechanical Ventilation (2) S</td>
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<td>Course provides a basic understanding of essentials for mechanical ventilation. Includes determining the need for ventilatory support, the associated physiology and how ventilatory support is initiated, maintained, monitored, and discontinued.</td>
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<tr>
<td>ResThy 2330</td>
<td>Entry Level Respiratory Therapy Review (1) S</td>
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<tr>
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<td>Course is a comprehensive review intended to prepare the student for the entry-level certification/licensure examination. The material covered is based on the examination matrix provided by the National Board for Respiratory Care (N.B.R.C.).</td>
</tr>
<tr>
<td>ResThy 2520</td>
<td>Principles of Pharmacology (2) F</td>
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<tr>
<td></td>
<td>Introduction to pharmacology, including general principles, autonomic and central nervous system agents, and cardiovascular agents. Also includes drugs used in managing renal, GI tract, endocrine, and infectious or neoplastic diseases and disorders.</td>
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<tr>
<td>ResThy 2700</td>
<td>Clinical Applications (4) F</td>
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<td>Clinical rotations in various medical settings performing skills learned and practiced in ResThy 2140. Recommending and modifying basic therapies will be emphasized utilizing patient assessment skills and review of patient medical history. Concurrent enrollment in ResThy 2140.</td>
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<tr>
<td>ResThy 2710</td>
<td>Specialty Clinical Experiences (1) S</td>
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<td>Clinical rotations in various medical settings providing the opportunity to observe and participate in various specialty areas within the profession, including PFTs, cardiac testing, EKGs, ABGs, and long-term artificial airway care. Concurrent enrollment in ResThy 2160.</td>
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<tr>
<td>ResThy 2720</td>
<td>Clinical Applications (3) S</td>
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<td>Clinical rotations in various medical settings performing skills learned and practiced in ResThy 2140. Initiating, monitoring, and weaning from mechanical ventilation will be emphasized utilizing patient assessment skills. Case studies will be used to practice critical thinking skills in the management of ICU patients. Concurrent enrollment in ResThy 2160.</td>
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<tr>
<td>ResThy 2800</td>
<td>Independent Projects (1-3) F S</td>
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<td>Projects must meet departmental and professional goals and standards and must have instructor approval prior to beginning project; enrollment by permission only.</td>
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<tr>
<td>ResThy 2830</td>
<td>Directed Readings (1-2) F S</td>
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<td>Readings must meet departmental and professional goals and standards and must have instructor approval prior to beginning; enrollment by permission only.</td>
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<tr>
<td>ResThy 2920</td>
<td>Short Courses, Workshops, Institutes and Special Programs (1-3) F S</td>
</tr>
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<td>Consult semester schedule for current offerings. The specific title and credit authorized will appear on student transcript.</td>
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<tr>
<td>ResThy 3210</td>
<td>Advanced Cardiopulmonary Anatomy and Physiology (2) F</td>
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<td>Cardiopulmonary anatomy and physiology specifically for the therapist-level practitioner. Includes advanced anatomical considerations of the cardiac, pulmonary, and renal systems.</td>
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<tr>
<td>ResThy 3220</td>
<td>Advanced Cardiopulmonary Pathophysiology (2) S</td>
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<td>Pathophysiology and diagnosis of coronary artery disease, fungal lung disease, neoplasms, HIV, ARDS, chest injuries; shock in relation to the care of the trauma patient, and a differentiation of the intracellular and extracellular fluid compartments.</td>
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<tr>
<td>ResThy 3230</td>
<td>Advanced Cardiopulmonary Technology (2) S</td>
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<td>Advanced diagnostic procedures and interpretive skills in cardiopulmonary function, lung dynamics, specialty gases, blood gas analysis, and metabolic assessment.</td>
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<tr>
<td>ResThy 3260</td>
<td>Neonatal/Pediatric Respiratory Care (2) F S</td>
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<td>Pediatric and neonatal respiratory care with emphasis on intensive care activities, therapeutic procedures, life support modalities and fetal, neonatal, pediatric pathophysiology.</td>
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<tr>
<td>ResThy 3270</td>
<td>Adult Critical Care (2) F S</td>
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<td>Advanced adult respiratory intensive care, including hemodynamic monitoring, ventilation/perfusion monitoring, pulmonary assessment and airway management.</td>
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<tr>
<td>ResThy 3280</td>
<td>Patient Care Continuum/Quality Management (3) F S</td>
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<td>Theory and principles of pulmonary and spinal cord rehabilitation, polysomnography, discharge planning, patient education, quality management, home and self care, legal, ethical, and moral considerations of chronic and extended care.</td>
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<tr>
<td>ResThy 3500</td>
<td>Survey of Polysomnography (1)</td>
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<td>Introduction to polysomnography as a profession. Course includes an overview of the polysomnogram, sleep disorders as they affect the general population, typical employment in the field, and employment opportunities. Also includes an introduction to the professional organization of sleep and requirements to become a registered polysomnographic technologist (R.P.S.G.T). Prerequisites: medical terminology, anatomy, and physiology or completion of entry-level respiratory therapy program or C.R.T., R.R.T., or R.N. credential.</td>
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<tr>
<td>ResThy 3501</td>
<td>Anatomy and Physiology of Sleep (3)</td>
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<td>Introduction to the anatomy and physiology of the neurologic, cardiac, and respiratory systems during sleep. Basic anatomy and physiology of wake-sleep cycles are studied, with emphasis on changes that occur during varying stages of sleep and during common sleep disorders. Introduction to the EEG, EOG, EKG, EMG, and other polysomnography data recorders. Prerequisites: medical terminology, anatomy, and physiology or completion of entry-level respiratory therapy program or C.R.T., R.R.T., or R.N. credential.</td>
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<tr>
<td>ResThy 3502</td>
<td>Introduction to Sleep Disorders (2)</td>
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<td>Course provides an overview of the history of sleep medicine, normal sleep physiology, effects of the sleep-wake stage, sleep disorders and abnormal sleep physiology, and an introduction to polysomnography (including patient interaction, sensor and lead placements, and instrumentation). Course also introduces the fundamentals of therapeutic interventions utilized to treat sleep disorders. Prerequisites: medical terminology, anatomy, and physiology or completion of entry-level respiratory therapy program or C.R.T., R.R.T., or R.N. credential.</td>
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<tr>
<td>ResThy 3503</td>
<td>Instrumentation and Computers in Polysomnography (2)</td>
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<td>Course provides study of equipment, instrumentation, and recording devices utilized in polysomnography. Includes EEG waves, signal pathway and derivation of waves, impedance, sensitivity, time constants, amplifiers, filters, calibration, electrodes, artifacts (both equipment and patient-generated), computer basics,</td>
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and monitoring devices. Prerequisite: ResThy 3500 and ResThy 3502 or medical terminology, human anatomy and human physiology.

**ResThy 3504. Laboratory Practice of Instrumentation in Polysomnography (1)**
Course provides practice and application of operating principles of equipment, instrumentation, and recording devices utilized in polysomnography. Includes EEG waves, signal pathway and derivation of waves, impedance, sensitivity, time constants, amplifiers, filters, calibration, electrodes, artifacts (both equipment and patient-generated), computer basics, and monitoring devices. Concurrent enrollment with ResThy 3503. Prerequisite: ResThy 3502 or medical terminology, human anatomy and human physiology.

**ResThy 3505. Therapeutics of Managing Sleep Apnea (2)**
Course provides current therapies and interventions for treatment of sleep apneas. Interventions include positive airway pressure therapy (nasal CPAP and bi-level CPAP), surgery, and dental devices. Patient compliance and outcomes of these treatments are included. Prerequisite: ResThy 3501 and ResThy 3502.

Course provides detailed description and discussion of specific diagnostic procedures in PSG, including multiple sleep latency tests, maintenance of wakefulness test, REM behavior disorder studies, MMPI, movement disorders, TCM, nocturnal seizure disorders, esophageal balloon procedures, and others. Prerequisite: ResThy 3502 and ResThy 3503.

**ResThy 3507. Event Recognition and Polysomnography Scoring (3)**
Course provides advanced study of sleep stages and recognition of EEG characteristics of each stage. Multi-channel recording of breathing events, leg movements, ocular movements, cardiac and oxygenation monitoring, parasomnias, and interictal and ictal epileptic events are also presented. Course will include review and scoring of 12-hour polysomnography records to determine the overall sleep score. Prerequisite: ResThy 3501 and ResThy 3502.

**ResThy 3508. Sleep Center Management (1)**
Course is designed to prepare students for sleep center management in hospitals and independent facilities. Course includes sleep laboratory requirements for accreditation, personnel requirements and training, PSG study documentation, technician manuals, quality assurance, policies and procedures, and lab protocols. ResThy 3500 or credential as C.R.T., R.R.T., or R.N.

**ResThy 3509. Cases in Sleep Medicine (2)**
Course will include physician presentations or case studies of patients with a variety of sleep disorders. Case-based learning is applied in the context of patient presentation and initial interview and diagnostic findings, determination of appropriate sleep medicine studies, interpretation of patient findings, recommendation for patient therapy, and follow-up of patient compliance and outcome(s) of therapeutic intervention. Prerequisites: ResThy 3502 and ResThy 3505.

**ResThy 3510. Clinical Practice I in Polysomnography (2)**
Introduction to the sleep laboratory and the set-up, monitoring, and therapeutic interventions associated with polysomnography. Students will be oriented to patient interviewing and selection, OSHA standards, sleep laboratory standards, and confidentiality. Competency is demonstrated in patient set-up, producing a reliable PSG, recognizing artifact, and basic therapeutic interventions for common sleep disorders. Concurrent enrollment in ResThy 3503 and ResThy 3504. Prerequisite: ResThy 3502.

**ResThy 3511. Clinical Practice II in Polysomnography (2)**
Case-based clinical applications course. Course requires competency in complete patient management (patient referral and interview, physician consult, patient study[es], therapeutic intervention and follow-up of patient compliance). Students will develop the patient history and physical, perform the study, score the patient record, interpret the report, apply therapy, and follow-up patient compliance. Concurrent enrollment in ResThy 3505. Prerequisites: ResThy 3502 and ResThy 3510.

Clinical applications course focusing on experience in performing advanced technical procedures, including multiple sleep latency tests, maintenance of wakefulness tests, REM behavior disorders studies, MMPI, movement disorders, TCM, nocturnal seizure disorders, esophageal balloon procedures, and others. Concurrent enrollment in ResThy 3506. Prerequisites: ResThy 3502, ResThy 3510, and ResThy 3511.

**ResThy 3760. Clinical Applications of Neonatal/Pediatric Respiratory Care (4) F. S**
The clinical application of pediatric and neonatal assessments as they relate to selection and use of respiratory care procedures and equipment specific for this patient population. To be taken concurrently with ResThy 3260.

**ResThy 3770. Clinical Applications of Adult Critical Care (4) F. S**
Adult respiratory care in the intensive care setting [shock-trauma, thoracic, burn ICUs] with emphasis on hemodynamic monitoring, ventilation/perfusion monitoring, pulmonary assessment and airway management. To be taken concurrently with ResThy 3270.

**ResThy 3780. Clinical Applications (2)**

**ResThy 3790. Clinical Simulation Seminar (2) F. S**
Problem-based clinical concepts course: comprehensive program review including written and clinical simulation examinations.

**ResThy 4800. Independent Projects (1-6)**
Student designed, instructor approved projects which will further develop cognitive or psychomotor skills for the baccalaureate level respiratory care practitioner. Projects must meet departmental and professional goals and standards and must have instructor approval prior to beginning project. Enrollment by permission only.

**ResThy 4830. Directed Readings (1-3) F. S**
Student designed, instructor approved readings which will further develop professional knowledge or understanding for the baccalaureate level respiratory care practitioner. Readings must meet departmental and professional goals and standards and must have instructor approval prior to beginning. Enrollment by permission only.

**ResThy 4990. Senior Seminar (2)**
Mature discussion and/or laboratory experiences relating to current events in health care, legislative and ethical issues, and emerging technologies in respiratory care.