

# HEALTH SCIENCE

Justice Center 126, 417.625.9328

**Faculty** Pippin, Plucinski, Schiska, Scorse, Strait

## Mission

The mission of the Health Science degree is to provide a comprehensive baccalaureate degree that complements an associate allied health major. The degree is designed to promote critical thinking, leadership, communication and information skills, with a commitment to lifelong learning. Our graduates are academically prepared to pursue opportunities for advancement or graduate school.

Health is widely acknowledged as a major growth industry, with employment opportunities forecast to continue their strong upward trends of recent years. Opportunities for advancement will be greatest for people with a baccalaureate degree.

Associate degree prepared health profession majors and clinicians in the field who desire a baccalaureate degree have limited options to fulfill their educational goals. Currently, the associate health profession majors actively pursuing a baccalaureate degree cannot utilize the upper division courses completed in the health curriculum toward a baccalaureate degree. Graduates and clinicians from the health professions continually inquire about baccalaureate degree options to meet their busy professional lives. The new Health Science degree is a specified course of study that would enhance a clinician's expertise and opportunities for advancement. The design of the Health Science curriculum is to prepare students for career paths in the health sector, including administration, management, and health promoters in educational or clinical settings in school, community, or public health environments.

Courses in the curriculum are offered on campus as well as web based. The demand for this degree will be great among current students, past graduates, and clinicians working in their field.

The Bachelor of Science degree in Health Sciences is granted to students who complete the required program of study. These requirements include the basic requirements for all Bachelor of Science degree programs, required science and other supportive courses in the health science areas of emphasis plus 18 hours of core identified for the health science major. The degree is designed with two options.

- **Emphasis One:** Allows students who complete an Associate of Science in an allied health field to select a degree that will strengthen and utilize the associate curriculum within the Health Science degree.
- **Emphasis Two:** Is available for students who do not have a health profession background but would like to pursue a Bachelor of Health Science degree. As a major in B.S. Health Science, students will undertake a course of study that blends three areas of emphasis that is comprised not only of the Health Science (18 hours) core requirements but includes courses in Business (21 hours) and the Life/Health Sciences (21-27 hours).

The courses in the curriculum are offered on campus as well as web based. The demand for this degree will be great among current students, past graduates, and clinicians currently working in the health industry. The following is the curriculum for the Bachelor of Science Degree in Health Science.

## Option:

- Dental Hygiene
- Radiology Technology
- Respiratory Therapy
- Business / Life-Health Science

## Option – Dental Hygiene

<b>Core Requirements (p. 34) 51*</b>	<b>39</b>
<b>Health Sciences</b>	<b>18</b>
Comm 305 Intercultural Communication (WI) * (Area 5A)	3
MM 350 Fundamentals of Organizational Management (WI)	3
Phil 312 Biomedical Ethics	3
Psy 320 Applied Statistics for Behavioral & Natural Science	3
Bio 380 OR Bio 370 Environmental Health	3
HS 390 Health Care System	3
<b>Dental Hygiene Core Requirements</b>	<b>68</b>
Bio 231 General & Medical Microbiology	5
Bio 121 Anatomy & Physiology I * (Area 3A)	4
Bio 221 Anatomy & Physiology II	5
Chem 100 General Chemistry* (Area 3B)	5
Bio 240 Radiation Biology	3
Psy 100 General Psychology or Introduction to Sociology **	3
DH 101 Fundamental of Dental Hygiene	4
DH 102 Fundamental of Dental Hygiene II	4
DH 140 Dental Morphology	1
DH 150 Oral Histology and Embryology	3
DH 160 Dental Radiology	2
DH 300 Dental Health Education	3
DH 340 Periodontology & Pathology	4
DH 220 Dental Materials	3
DH 190 Clinical Dental Hygiene I	2
DH 290 Clinical Dental Hygiene II (WI)	5
DH 390 Clinical Dental Hygiene III	5
DH 310 Nutrition	2
DH 320 Pharmacology	2
DH 330 Ethics & Community Dentistry	3
(19 Upper Division in Dental Hygiene Core)	
<b>Total</b>	<b>125</b>

\*Required course satisfies major requirements and Core requirements.

\*\* Both Sociology and Psychology are required. One course is built into the Core Curriculum and the other should be taken as a dental hygiene requirement.

\*\*\* Three hours of Upper Division electives needed after completion of the Dental Hygiene and Health Science Core.

## Option – Radiology Technology

<b>Core Requirements (p. 34) 51*</b>	<b>44</b>
<b>Health Sciences</b>	<b>18</b>
Comm 305 Intercultural Communication (WI)* (Area 5A)	3
MM 350 Fundamentals of Organizational Management (WI)	3
Phil 312 Biomedical Ethics	3
Psy 320 Applied Statistics for Behavioral and Natural Science	3
Bio 380 Epidemiology	3

OR		
Bio 370	Environmental Health	3
HS 390	Health Care System	3
<b>Radiology Core Requirements</b> . . . . . <b>57</b>		
Bio 121	Anatomy and Physiology I* (Area 3A)	4
Bio 221	Anatomy and Physiology II	5
Bio 240	Radiation Biology	3
Rad 101	Introduction to Radiology	3
Rad 110	Clinical Training I	2
Rad 111	Medical Term	3
Rad 132	Principles of Radiographic Exposure	3
Rad 142	Radiographic Positioning I	3
Rad 170	Radiologic Physics	3
Rad 210	Clinical Training II	3
Rad 241	Radiographic Positioning II	3
Rad 290	Clinical Training III	2
Rad 301	Film Critique & Quality Management	2
Rad 320	Radiographic Positioning III	3
Rad 350	Patient Care in Radiology	2
Rad 340	Clinical Training IV	3
Rad 360	Clinical Training V	3
Rad 370	Advanced Topics in Radiology (WI)	2
Rad 380	Clinical Training VI	2
Rad 399	Advanced Radiology	3
(20 Upper Division in Radiology Core)		
<b>Electives</b>		<b>5</b>
<b>Total</b>		<b>124</b>

\* Required course satisfies major requirements and Core requirements.

<b>Option - Respiratory Therapy</b>		
<b>Core Requirements (p. 34) 51*</b> . . . . . <b>44</b>		
<b>Health Sciences</b> . . . . . <b>18</b>		
Comm 305	Intercultural Communication (WI) *	3
	(Area 5A)	
MM 350	Fundamentals of Organizational Management (WI)	3
Phil 312	Biomedical Ethics	3
Psy 320	Applied Statistics for Behavioral and Natural Science	3
Bio 380	Epidemiology	
OR		
Bio 370	Environmental Health	3
HS 390	Health Care System	3
<b>Respiratory Requirements</b> . . . . . <b>61</b>		
Bio 121	Anatomy and Physiology I* (Area 3A)	4
Resp 101	Respiratory Therapy Foundations	3
Resp 102	Cardiopulmonary Sciences	3
Resp 105	Cardiopulmonary Anatomy and Physiology	3
Resp 107	Respiratory Therapy Procedures	3
Resp 108	Respiratory Procedures Lab	3
Resp 120	Cardiopulmonary Pathology	3
Resp 125	Respiratory Therapy Clinical I	3
Resp 129	Cardiopulmonary Pharmacology	3
Resp 222	Introduction to Mechanical Vent	4
Resp 226	Cardiopulmonary Diagnostic	3
Resp 239	Respiratory Therapy Clinical II	5
Resp 307	Cardiopulmonary Assessment	6
Resp 311	Neonatal/Pediatric Care	3
Resp 312	Mechanical Ventilation	3
Resp 313	Alternate Site Respiratory Care (WI)	3

Resp 340	Advanced Level Clinical Practice	5
Resp 341	Research, Issues, Methods	1
(21 Upper Division Hours in Respiratory Core)		
<b>Elective Upper Division</b>		<b>1</b>
<b>Total</b>		<b>124</b>

\* Required courses satisfy major requirements and Core requirements.

\*\*HS 499 Internship is optional for one hour Upper Division elective needed after completion of the Respiratory and Health Science Core.

<b>Option – Business / Life-Health Science</b>		
<b>Core Requirements (p. 34) 51*</b> . . . . . <b>44</b>		
<b>Health Sciences</b> . . . . . <b>18</b>		
Comm 305	Intercultural Communication (WI)*	3
	(Area 5A)	
MM 350	Fundamentals of Organizational Management (WI)	3
Phil 312	Biomedical Ethics	3
Psy 320	Applied Statistics for Behavioral and Natural Science	3
Bio 380	Epidemiology	
OR		
Bio 370	Environmental Health	3
HS 390	Health Care System	3

<b>Health Science Business Emphasis Requirements</b>		
<b>Minor in General Business (p. 172) 21**</b> . . . . . <b>15</b>		
Life/Health Science Requirements . . . . . 20-23		
Bio 121	Human Anatomy and Physiology I* . . .	4
And	(Area 3A)	
Bio 221	Human Anatomy and Physiology II . . .	5
OR		
Bio 101	General Biology* (Area 3A)	4
and		
Bio 201	Human Anatomy	4
AND		
Bio 301	Human Physiology	4
Kine 385	Nutrition for Human Development	3
Rad 111	Medical Terminology	3
Chem 100	Introductory Chemistry	5
<b>Electives</b>		<b>17-23</b>
<b>Total</b>		<b>124</b>

\*Required course satisfies major requirements and Core requirements.

\*\*MM 350 Fundamentals of Organizational Management included in Health Science Core and Econ 202 Area 5C). 12-16 hours of Upper Division electives required after completing Core listed above.

**For additional information contact:**  
 Dr. Tia M. Strait, Dean, School of Technology  
 Office: Justice Center 126  
 Phone: 417.625.3155  
 Email: strait-t@mssu.edu

Ms. Glenda Pippin, Program Director, Respiratory Therapy  
 Office: Justice Center 144  
 Phone: 417.659.4405  
 Email: pippin-g@mssu.edu

Mr. Alan Schisck, Program Director, Radiology Technology  
Office: Kuhn Hall 304  
Phone: 417.625.3118  
Email: schiska-@mssu.edu

Dr. Sandra Scorse DeTar, Department Head, Dental Hygiene  
Office: Ummel Technology Bldg 111-E  
Phone: 417.625.9600  
Email: scorse-s@mssu.edu

Dr. Karen Plucinski, Department Head, Biology  
Office: Reynolds Hall 215  
Phone: 417.625.9891  
Email: plucinski-k@mssu.edu

---

---

## ***Course Descriptions***

---

---

HS 390 3 hrs. cr.

### **Health Care Systems**

This course incorporates a discussion of the three major health care systems that have evolved in the United States, the impact of diseases on systems development, how financing has influenced the structure, and effect on access to care. Three lecture hours a week. Prerequisites: Econ 180, Psc 120, Psy 100, or Soc 110.

HS 499 (Demand) 1-3 hrs. cr.

### **Independent Study**

Individually directed study for advanced majors in the areas of health science. The adviser with approval of the department head structures the independent study course. Prerequisite: Upper division standing with an overall GPA of 3.0 or above. The adviser, the department head, and the dean of the school must approve registration in the course.

***Other course descriptions for course requirements in the Health Science curriculum are listed in the School Arts and Sciences section under Biology, Communication, and Philosophy; School of Business, and School of Education under Psychology.***