

HEALTH SCIENCES AND TECHNOLOGY

HEALTH SCIENCE

**ARE YOU INTERESTED IN HEALTHCARE OR MEDICINE?****DO YOU LIKE HELPING PEOPLE?**

Explore a career in Health Science.

WHAT IS IT?

Healthcare careers focus on the health and well-being of patients, and advancing the cause of medicine. Work is performed generally in hospitals or clinics, but can also be found in offices, nursing facilities, and increasingly, people's homes. Technology has been transforming healthcare in recent years, allowing patients to receive better care and live longer, more productive lives.

LEADS TO THESE JOBS:

- Certified Nursing Assistant
- Dietician
- Health Information Technician
- Home Health Aide
- Medical Billing Coder
- Pharmacy Technician
- Physician
- Registered Nurse
- Therapist



WHAT WILL I DO?

Physicians, nurses, and therapists work directly with patients to diagnose, treat, and comfort their patients. Researchers, biomedical engineers, and technicians work in the laboratory developing new cures for disease. You might also work as a medical assistant or health information specialist that keeps history of medical records for insurance or future use.

IS THIS FOR ME?

- Like to help people
- Patient
- Work well under stress
- Empathetic
- Flexible
- Interested in the human body
- Enjoy math and science



**EMPLOYER
SPOTLIGHT:****HEARTLAND
REGIONAL MEDICAL
CENTER**

Marion, IL
www.heartlandregional.
com



HEARTLAND REGIONAL
MEDICAL CENTER

Serving the Southern Illinois community since 1977, Heartland Regional Medical Center is a community medical provider offering a comprehensive range of health and hospital services including diagnostic, medical, surgical and emergency services.

Our partnership with rural Johnston City High School has provided students a variety of job-shadowing, volunteer, work-based learning, scholarship and employment opportunities. Collaboration has allowed secondary students who are CNAs to also complete the clinical skills necessary for phlebotomy certification. Planning continues to provide additional educational, credentialing and career opportunities.

IN-DEMAND OCCUPATIONS IN ILLINOIS

| Education Level | Career Path | Median Salary | Job Growth Over Next 10 Years | Job Openings Projected Over Next 10 Years | Training Time Needed |
|---------------------------|------------------------------|---------------|-------------------------------|---|-----------------------------------|
| High School | Emergency Medical Technician | \$31,623 | 10% | 9,160 | Postsecondary Vocational Award |
| | Home Health Aide | \$23,280 | 25% | 59,010 | Short-term On-the-job Training |
| | Nursing Assistant | \$26,521 | 5% | 73,410 | Postsecondary Vocational Award |
| | Pharmacy Technician | \$31,301 | 5% | 16,030 | Moderate-term On-the-job Training |
| Associate's Degree | Dental Hygienist | \$73,531 | 9% | 5,830 | Associate's Degree |
| Bachelor's Degree | Registered Nurse | \$70,189 | 15% | 86,920 | Bachelor's Degree |
| Master's Degree | Physical Therapist | \$89,574 | 19% | 7,400 | Master's Degree |

Source – Illinois Department of Employment Security, 2017



HEALTH SCIENCES AND TECHNOLOGY ENDORSEMENT

By pursuing coursework related to **Health Science** careers in high school, you have the opportunity to receive a **Health Sciences and Technology Endorsement** with your diploma upon high school graduation.



English



Go

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CLUSTER



Health Science

Favorite



Type a career

Overview

There are many challenging educational and training opportunities within the high-skilled world of Health Science. Learners need a solid background in math, science, communications, and technical skills. Education and training can be obtained in high schools, technical colleges/institutes and universities. Along the way, career guidance professionals assist learners in assessing their educational goals, interests, abilities and skills to facilitate a good match to the cluster's many pathway options. Learners participate in relevant educational opportunities framed in the context of the cluster. They gain knowledge and skills through coordinated workplace learning experiences such as site visits, job shadowing and internships. If they choose, they may achieve valuable skill certifications that lead to employment. Colleges and universities offer advanced degrees and industry certifications that prepare learners for professional and technical careers. This Health Science Career Cluster orients students to careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medivac units, sports arenas, space centers, or within the community.

This Cluster Contains the Following Pathways

Therapeutic Services

Diagnostic Services

Health Informatics

Support Services

Biotechnology Research and Development

Employment Outlook

Employment of healthcare occupations is projected to grow 19 percent through 2024, much faster than the average for all occupations. This growth is expected due to an aging population and because federal health insurance reform should increase the number of individuals who have access to health insurance.
 The median annual wage for healthcare practitioners and technical occupations (such as registered nurses, physicians and surgeons, and dental hygienists) is \$61,710, which is higher than the median annual wage for all occupations in the economy of \$35,540. However, healthcare support occupations (such as home health aides, occupational therapy assistants, and medical transcriptionists) has a median annual wage of \$26,440, lower than the median annual wage for all occupations in the economy.
 Home health aides are predicted to grow by 38 percent, medical assistants will grow by 23 percent, and physician assistants will grow by 30 percent. The continued growth in both the aging and general population, as well as an increase in several chronic diseases, such as diabetes, will drive the need for more healthcare jobs.

Plan of study

| EDUCATION LEVELS | GRADE | English/ Language Arts | Math | Science | Social Studies/ Sciences | Other Required Courses Other Electives Recommended Electives Learner Activities | *Career and Technical Courses and/ or Degree Major Courses for Health Science | |
|---|---|---|-----------------------------|-----------------------------|-------------------------------|---|---|--|
| Interest Inventory Administered and Plan of Study Initiated for all Learners | | | | | | | | |
| SECONDARY | 9 | English/ Language Arts I | Algebra I | Dependent on chosen pathway | State History Civics | All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities are also important including public speaking, record keeping and work-based experiences. A foreign language is recommended. | **Health Science I: Introduction to Health Science | |
| | 10 | English/ Language Arts II | Dependent on chosen pathway | Dependent on chosen pathway | U.S. History | | **Information Technology Applications | |
| | 11 | English/ Language Arts III | Dependent on chosen pathway | Dependent on chosen pathway | World History Sociology | | **Health Science II: Health, Safety and Ethics in the Health Environment | |
| | College Placement Assessments-Academic/Career Advisement Provided | | | | | | **Health Science III: Employment in Health Occupations | |
| | 12 | English/ Language Arts IV | Dependent on chosen pathway | Dependent on chosen pathway | Psychology Economics | | Continue courses pertinent to the pathway selected. | |
| Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes. | | | | | | | | |
| POSTSECONDARY | Year 13 | English Composition | Dependent on chosen pathway | Dependent on chosen pathway | American Govt. Psychology | All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status. Certain local student organization activities may also be important to include. Work-based learning is an integral part of this Career Cluster. | Continue courses pertinent to the pathway selected. | |
| | Year 14 | Speech/ Oral Communication Technical Writing | Dependent on chosen pathway | Dependent on chosen pathway | American History Sociology | | | |
| | Year 15 | Continue courses in the area of specialization. | | | | | | |
| | Year 16 | | | | | | | |

Zoom

Related Occupations

Administrative Services Managers

Ambulance Drivers and Attendants. Except Emergency Medical Technicians

Art, Drama, and Music Teachers, Postsecondary

Athletic Trainers

Audiologists

Biological Scientists, All Other

Cardiovascular Technologists and Technicians

Chiropractors

Claims Adjusters, Examiners, and Investigators

Claims Examiners, Property and Casualty Insurance

Clinical Psychologists

Clinical, Counseling, and School Psychologists

Communications Teachers, Postsecondary

Computer and Information Research Scientists

Computer Programmers

Computer User Support Specialists

Cooks, Institution and Cafeteria

Counseling Psychologists

Dental Assistants

Dental Hygienists

Dental Laboratory Technicians

Dentists, General

Diagnostic Medical Sonographers

Dietetic Technicians

Dietitians and Nutritionists

Editors

Emergency Medical Technicians and Paramedics

Engineers, All Other

Executive Secretaries and Executive Administrative Assistants

Family and General Practitioners

Farm and Home Management Advisors

Fine Artists, Including Painters, Sculptors, and Illustrators

First-Line Supervisors of Food Preparation and Serving Workers

First-Line Supervisors of Office and Administrative Support Workers

Food Batchmakers

Health Diagnosing and Treating Practitioners, All Other

Health Educators

Health Specialties Teachers, Postsecondary

Health Technologists and Technicians, All Other

Healthcare Practitioners and Technical Workers, All Other

Healthcare Support Workers, All Other

Home Economics Teachers, Postsecondary

Home Health Aides

Industrial-Organizational Psychologists

Internists, General

Life, Physical, and Social Science Technicians, All Other

Massage Therapists

Medical and Clinical Laboratory Technicians

Medical and Clinical Laboratory Technologists

Medical and Clinical Laboratory Technologists

Medical and Health Services Managers

Medical Appliance Technicians

Medical Assistants

Medical Equipment Preparers

Medical Records and Health Information Technicians

Medical Scientists, Except Epidemiologists

Medical Secretaries

Medical Transcriptionists

Mental Health Counselors

Musicians, Instrumental

Natural Sciences Managers

Nuclear Equipment Operation Technicians

Nuclear Medicine Technologists

Nuclear Monitoring Technicians

Nuclear Technicians

Nursing Assistants

Nursing Instructors and Teachers, Postsecondary

Occupational Health and Safety Specialists

Occupational Health and Safety Technicians

Occupational Therapists

Occupational Therapy Aides

Occupational Therapy Assistants

Ophthalmic Laboratory Technicians

Opticians, Dispensing

Optometrists

Oral and Maxillofacial Surgeons

Orderlies

Orthodontists

Orthotists and Prosthetists

Pharmacists

Pharmacy Aides

Pharmacy Technicians

Physical Scientists, All Other

Physical Therapist Aides

Physical Therapist Assistants

Physical Therapists

Physician Assistants

Physicians and Surgeons, All Other

Physicists

Podiatrists

Prosthodontists

Psychiatric Aides

Psychiatric Technicians

Psychiatrists

Psychologists, All Other

Public Relations Specialists

Radiation Therapists

Radiologic Technicians

Radiologic Technologists

Receptionists and Information Clerks

Recreational Therapists

Rehabilitation Counselors

Respiratory Therapists

Respiratory Therapy Technicians

School Psychologists

Singers

Software Developers, Applications

Speech-Language Pathologists

Substance Abuse and Behavioral Disorder Counselors

Surgeons

Surgical Technologists

Therapists, All Other

Veterinarians

Veterinary Assistants and Laboratory Animal Caretakers

Veterinary Technologists and Technicians

Related Majors

Acupuncture

Advanced General Dentistry (Cert, MS, PhD)

Advanced/Graduate Dentistry and Oral Sciences, Other

Aerospace Medicine - (Residency Program)

Allied Health and Medical Assisting Services, Other

Allied Health Diagnostic, Intervention, & Treatment Professions, Other

Alternative & Complementary Medicine & Medical Systems, Other

Anesthesiologist Assistant

Aromatherapy

Art Therapy/Therapist

Asian Bodywork Therapy

Assistive/Augmentative Technology & Rehabilitation Engineering

Athletic Training/Trainer

Audiology/Audiologist & Speech-Language Pathology/Pathologist

Audiology/Audiologist and Hearing Sciences

Ayurvedic Medicine/Ayurveda

Biology Technician/Biotechnology Laboratory Technician

Biotechnology

Blood Bank Technology Specialist

Cardiopulmonary Technology/Technologist

Cardiovascular Technology/Technologist

Chiropractic (DC)

Chiropractic Assistant/Technician

Clinical and Industrial Drug Development (MS, PhD)

Clinical Laboratory Science/Medical Technology/Technologist

Clinical Nutrition/Nutritionist

Clinical, Hospital, & Managed Care Pharmacy (MS, PhD)

Clinical/Medical Laboratory Assistant

Clinical/Medical Laboratory Science & Allied Professions, Other

Clinical/Medical Laboratory Technician

Clinical/Medical Social Work

Communication Disorders Sciences and Services, Other

Communication Disorders, General

Community Health and Preventive Medicine

- Comparative & Laboratory Animal Medicine (Cert, MS, PhD)
- Cytogenetics/Genetics/Clinical Genetics Technology/Technologist
- Cytotechnology/Cytotechnologist
- Dance Therapy/Therapist
- Dental Assisting/Assistant
- Dental Clinical Sciences, General (MS, PhD)
- Dental Hygiene/Hygienist
- Dental Laboratory Technology/Technician
- Dental Materials (MS, PhD)
- Dental Public Health & Education (Cert, MS/MPH, PhD/DPH)
- Dental Public Health Specialty - (Residency Program)
- Dental Public Health Specialty - (Residency Program)
- Dental Residency Program, Other
- Dental Services and Allied Professions, Other
- Dentistry (DDS, DMD)
- Diagnostic Medical Sonography/Sonographer & Ultrasound Technician
- Dietetic Technician (DTR)
- Dietetics and Clinical Nutrition Services, Other
- Dietetics/Dietitian (RD)
- Dietitian Assistant
- Direct Entry Midwifery (LM, CPM)
- Electrocardiograph Technology/Technician
- Electroneurodiagnostic/Electroencephalographic Technology/Technologist
- Emergency Care Attendant (EMT Ambulance)
- Emergency Medical Technology/Technician (EMT Paramedic)
- Endodontics Speciality - (Residency Program)
- Endodontics/Endodontology (Cert, MS, PhD)
- Energy and Biologically Based Therapies, Other
- Environmental Health
- Foods, Nutrition, and Related Services, Other
- Foods, Nutrition, and Wellness Studies, General
- Foodservice Systems Administration/Management
- Gene/Genetic Therapy
- Genetic Counseling/Counselor
- Health Aide
- Health Aides/Attendants/Orderlies, Other
- Health and Medical Administrative Services, Other
- Health Communication
- Health Information/Medical Records Administration/Administrator
- Health Information/Medical Records Technology/Technician

Health Professions and Related Clinical Sciences, Other

Health Services Administration

Health Unit Coordinator/Ward Clerk

Health Unit Manager/Ward Supervisor

Health/Health Care Administration/Management

Health/Medical Claims Examiner

Health/Medical Physics

Hematology Technology/Technician

Herbalism/Herbalist

Histologic Technician

Histologic Technology/Histotechnologist

Home Health Aide/Home Attendant

Homeopathic Medicine/Homeopathy

Hospital & Health Care Facilities Administration/Management

Human Nutrition

Hypnotherapy/Hypnotherapist

Industrial & Physical Pharmacy & Cosmetic Sciences (MS, PhD)

International Public Health/International Health

Kinesiotherapy/Kinesiotherapist

Laboratory Animal Medicine - (Residency Program)

Large Animal/Food Animal & Equine Surgery & Medicine (Cert, MS, PhD)

Massage Therapy/Therapeutic Massage

Maternal and Child Health

Medical Administrative/Executive Assistant & Medical Secretary

Medical Illustration and Informatics, Other

Medical Illustration/Medical Illustrator

Medical Informatics

Medical Insurance Coding Specialist/Coder

Medical Insurance Specialist/Medical Biller

Medical Office Assistant/Specialist

Medical Office Computer Specialist/Assistant

Medical Office Management/Administration

Medical Radiologic Technology/Science - Radiation Therapist

Medical Reception/Receptionist

Medical Staff Services Technology/Technician

Medical Transcription/Transcriptionist

Medical/Clinical Assistant

Medical/Health Management & Clinical Assistant/Specialist

Medication Aide

Medicinal and Pharmaceutical Chemistry (MS, PhD)

Medicine (MD)

Movement Therapy and Movement Education

Music Therapy/Therapist

Natural Products Chemistry & Pharmacognosy (MS, PhD)

Naturopathic Medicine/Naturopathy (ND)

Nuclear Medical Technology/Technologist

Occupational Health and Industrial Hygiene

Occupational Therapist Assistant

Occupational Therapy/Therapist

Ophthalmic & Optometric Support Services & Allied Professions, Other

Ophthalmic Laboratory Technology/Technician

Ophthalmic Technician/Technologist

Opticianry/Ophthalmic Dispensing Optician

Optometric Technician/Assistant

Optometry (OD)

Oral Biology and Oral Pathology (MS, PhD)

Oral Pathology Specialty - (Residency Program)

Oral/Maxillofacial Surgery (Cert, MS, PhD)

Orthodontics Specialty - (Residency Program)

Orthodontics/Orthodontology (Cert, MS, PhD)

Orthoptics/Orthoptist

Orthotist/Prosthetist

Osteopathic Medicine/Osteopathy (DO)

Pathology/Pathologist Assistant

Pediatric Dentistry/Pedodontics (Cert, MS, PhD)

Pedodontics Specialty - (Residency Program)

Perfusion Technology/Perfusionist

Periodontics Specialty - (Residency Program)

Periodontics/Periodontology (Cert, MS, PhD)

Pharmaceutics and Drug Design (MS, PhD)

Pharmacoeconomics/Pharmaceutical Economics (MS, PhD)

Pharmacy (PharmD [USA] PharmD, BS/BPharm [Canada])

Pharmacy Administration & Pharmacy Policy & Regulatory Affairs (MS, PhD)

Pharmacy Technician/Assistant

Pharmacy, Pharmaceutical Sciences, and Administration, Other

Phlebotomy/Phlebotomist

Physical Therapist Assistant

Physical Therapy/Therapist

Physician Assistant

Podiatric Medicine/Podiatry (DPM)

Polarity Therapy

Prosthodontics Specialty - (Residency Program)

Prosthodontics/Prosthodontology (Cert, MS, PhD)

Psychiatric/Mental Health Services Technician

Psychology, General

Psychology, Other

Public Health Education and Promotion

Public Health, General (MPH, DPH)

Radiation Protection/Health Physics Technician

Radiologic Technology/Science - Radiographer

Rehabilitation and Therapeutic Professions, Other

Reiki

Renal/Dialysis Technologist/Technician

Respiratory Care Therapy/Therapist

Respiratory Therapy Technician/Assistant

Small/Companion Animal Surgery & Medicine (Cert, MS, PhD)

Somatic Bodywork

Somatic Bodywork & Related Therapeutic Services, Other

Speech-Language Pathology/Pathologist

Surgical Technology/Technologist

Therapeutic Recreation/Recreational Therapy

Theriogenology - (Residency Program)

Traditional Chinese/Asian Medicine & Chinese Herbology

Veterinary Anatomy (Cert, MS, PhD)

Veterinary Biomedical & Clinical Sciences, Other (Cert, MS, PhD)

Veterinary Dentistry - (Residency Program)

Veterinary Dermatology - (Residency Program)

Veterinary Emergency and Critical Care Medicine - (Residency Program)

Veterinary Infectious Diseases (Cert, MS, PhD)

Veterinary Internal Medicine - (Residency Program)

Veterinary Medicine (DVM)

Veterinary Microbiology & Immunobiology (Cert, MS, PhD)

Veterinary Microbiology - (Residency Program)

Veterinary Nutrition - (Residency Program)

Veterinary Ophthalmology - (Residency Program)

Veterinary Pathology & Pathobiology (Cert, MS, PhD)

Veterinary Pathology - (Residency Program)

[Veterinary Physiology \(Cert, MS, PhD\)](#)[Veterinary Practice - \(Residency Program\)](#)[Veterinary Preventive Medicine - \(Residency Program\)](#)[Veterinary Preventive Medicine Epidemiology & Public Health \(Cert, MS, PhD\)](#)[Veterinary Radiology - \(Residency Program\)](#)[Veterinary Residency Programs, Other](#)[Veterinary Sciences/Veterinary Clinical Sciences, General \(Cert, MS, PhD\)](#)[Veterinary Surgery - \(Residency Program\)](#)[Veterinary Toxicology & Pharmacology \(Cert, MS, PhD\)](#)[Veterinary Toxicology - \(Residency Program\)](#)[Veterinary/Animal Health Technology/Technician & Veterinary Assistant](#)[Vocational Rehabilitation Counseling/Counselor](#)[Yoga Teacher Training/Yoga Therapy](#)[Zoological Medicine- \(Residency Program\)](#)

Source: States Career Clusters Initiative, 2017, www.careertech.org 



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sd129.org

[Contact Counselor](#)

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English



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PATHWAY



HEALTH SCIENCE CLUSTER

Biotechnology Research and Development

Favorite



Type a career

Overview

Careers in the Biotechnology Research and Development pathway involve bioscience research and development as it applies to human health. These scientists may study diseases to discover new treatments or invent medical devices used to directly assist patients or to improve the accuracy of diagnostic tests.

Credentials

Most entry-level careers in Biotechnology Research and Development require a master's degree. Few certifications or licensures are required for these careers at this time.

Employment Outlook

Biotechnology research plays a key role in scientific advancements that improve people's quality of life. Skilled professionals will be needed to help develop new treatments for diseases, such as cancer and Alzheimer's disease. In agriculture, biotechnology research will be used to create genetically engineered crops that provide greater yields and require less pesticide and fertilizer. Efforts to discover new and improved ways to clean and preserve the environment also will continue to add to job growth.
Most career opportunities in this pathway are available in universities, research institutions, government agencies, specialty laboratory facilities and major health organizations.

Plan of study

| EDUCATION LEVELS | GRADE | English/ Language Arts | Math | Science | Social Studies/ Sciences | Other Required Courses Other Electives Recommended Electives Learner Activities | *Career and Technical Courses and/or Degree Major Courses for Biotechnology Research and Development Pathway |
|---|---|--|--------------------------|---|-----------------------------------|---|---|
| Interest Inventory Administered and Plan of Study Initiated for all Learners | | | | | | | |
| SECONDARY | 9 | English/ Language Arts I | Algebra I | Biology | State History Civics | All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities are also important including public speaking, record keeping and work-based experiences. A foreign language is recommended. | • Health Science I: Introduction to Health Science • Information Technology Applications |
| | 10 | English/ Language Arts II | Geometry | Chemistry | U.S. History | | • Health Science II: Health, Safety and Ethics in the Health Environment |
| | 11 | English/ Language Arts III | Algebra II | Physics or other science course | World History Sociology | | • Health Science III: Employment in Health Occupations |
| | College Placement Assessments/Academic/Career Advisement Provided | | | | | | |
| | 12 | English/ Language Arts IV | Trigonometry Calculus | Anatomy and Physiology Physics | Psychology Economics | | • Health Science IV: Introduction to Biotechnology Research and Development |
| Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes. | | | | | | | |
| POSTSECONDARY | Year 13 | English Composition | Algebra or Calculus | Anatomy and Physiology Microbiology or Molecular Biology | American Government Psychology | All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status. Certain local student organization activities may also be important to include. Work-based learning is an integral part of this pathway. | • Health Science V: Biotechnology Research and Development Preparation |
| | Year 14 | Speech/ Oral Communication Technical Writing | Statistics | Cell Biology Biochemistry Organic Chemistry | American History Sociology | | • Continue Courses in the Area of Specialization |
| | Year 15 | Continue courses in the area of specialization. | | | | | |
| | Year 16 | | | | | | |

Zoom

Related Occupations

Biological Scientists, All Other

Health Specialties Teachers, Postsecondary

Natural Sciences Managers

Pharmacists

Related Majors

Biotechnology

Clinical and Industrial Drug Development (MS, PhD)

Industrial & Physical Pharmacy & Cosmetic Sciences (MS, PhD)

Medicinal and Pharmaceutical Chemistry (MS, PhD)

Natural Products Chemistry & Pharmacognosy (MS, PhD)

Pharmacoeconomics/Pharmaceutical Economics (MS, PhD)

Pharmacy, Pharmaceutical Sciences, and Administration, Other



English



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CAREER

Natural Sciences Managers

Favorite



Type a career

Overview

Knowledge and Skills

Tasks and Activities

Wages

Job Description

Plan, direct, or coordinate activities in such fields as life sciences, physical sciences, mathematics, statistics, and research and development in these fields.

Interests - Holland Interest Code ICR

Enterprising

Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.

Investigative

Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

Realistic

Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Related Occupations

Architectural and Engineering Managers

Fire-Prevention and Protection Engineers

Fraud Examiners, Investigators and Analysts

Logistics Engineers

Materials Scientists

Mining and Geological Engineers, Including Mining Safety Engineers

Petroleum Engineers

Risk Management Specialists

Supply Chain Managers

Transportation Managers

Related Majors

Accounting and Computer Science

Operations Research

Biotechnology

Logic

Biology/Biological Sciences, General

Biochemistry

Biophysics

Molecular Biology

Radiation Biology/Radiobiology

Botany/Plant Biology

Plant Pathology/Phytopathology

Plant Physiology

Botany/Plant Biology, Other

Cell/Cellular Biology and Histology

Anatomy

Cell/Cellular Biology and Anatomical Sciences, Other

Microbiology, General

Medical Microbiology and Bacteriology

Virology

Parasitology

Immunology

Zoology/Animal Biology

Entomology

Animal Physiology

Zoology/Animal Biology, Other

Animal Genetics

Plant Genetics

Pathology/Experimental Pathology

Pharmacology

Toxicology

Biometry/Biometrics

Biostatistics

Ecology

Marine Biology and Biological Oceanography

Evolutionary Biology

Ecology, Evolution, Systematics & Population Biology, Other

Biological and Biomedical Sciences, Other

Mathematics, General

Algebra and Number Theory

Analysis and Functional Analysis

Geometry/Geometric Analysis

Topology and Foundations

Applied Mathematics

Computational Mathematics

Applied Mathematics, Other

Statistics, General

Mathematics and Statistics, Other

Mathematics and Computer Science

Biopsychology

Gerontology

Natural Sciences

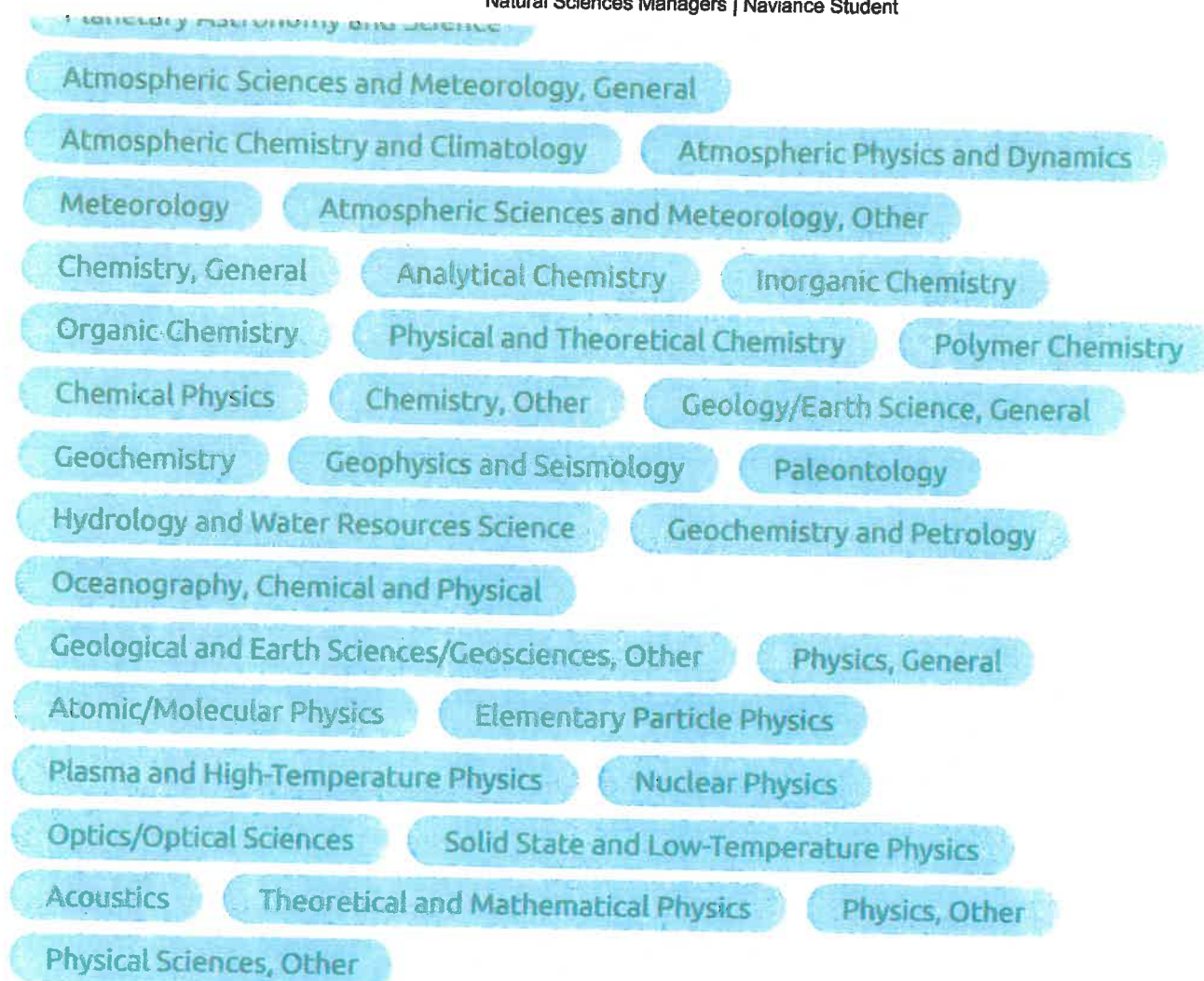
Nutrition Sciences

Astronomy

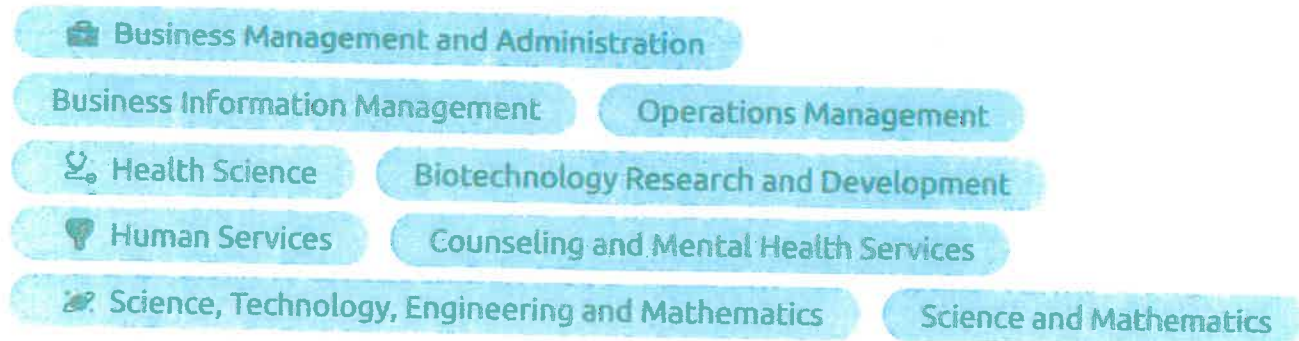
Astronomy

Astrophysics

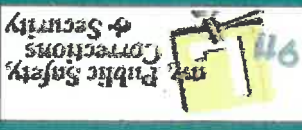
Planetary Astronomy and Science



Related Clusters and Pathways



Source: O*Net and the Bureau of Labor Statistics, U.S. Department of Labor. O*Net™ is a trademark of the U.S. Department of Labor, Employment and Training Administration.



Lunch and Learn Health Science

March 25th
In B140

during all lunch/SH periods (4-6)

Bring your lunch! Come and receive information from professionals about careers relating to the Health Science Career Cluster.

Interactive presentations will be held each lunch/study hall periods 4th, 5th & 6th.

Health Science Career Cluster

4 Year Plan

| ENGLISH | MATH | SCIENCE | SOCIAL STUDIES | CAREER & TECHNICAL or DEGREE MAJOR |
|---------|------|---------|----------------|------------------------------------|
|---------|------|---------|----------------|------------------------------------|

GRADE 9

| | | | | |
|-------------------------------------|------------------------------------|---------------------------|--|---|
| Freshman English Freshman Honors | Seq Alg 1 Algebra 1 Geometry | Biology Honors Biology | | Health Occupations and Communications Health Science 1 Health Science 2 Health Science 3 - Certified Nursing |
|-------------------------------------|------------------------------------|---------------------------|--|---|

GRADE 10

| | | | | |
|---|------------------------------------|-------------------------------|--|---|
| Sophomore English Sophomore Honors AP Seminar | Seq Alg 2 Geometry Algebra 2 | Chemistry Honors Chemistry | | Health Occupations and Communications Health Science 1 Health Science 2 Health Science 3 - Certified Nursing |
|---|------------------------------------|-------------------------------|--|---|

GRADE 11

| | | | | |
|---|----------------------------------|---|--------------------------|---|
| Junior English AP Language American Studies | Geometry Algebra 2 PreCalc | AP Physics Physics Conceptual Physics Honors Chemistry | United States History | Health Occupations and Communications Health Science 1 Health Science 2 Health Science 3 - Certified Nursing |
|---|----------------------------------|---|--------------------------|---|

GRADE 12

| | | | | |
|--|---|--|-----------------------------|--|
| Mass Communication Fundamentals of Speech Medical Literature and Research AP Seminar | Algebra 2 Advanced Algebra QLit / Prob PreCalc Calculus | DC Biology AP Chemistry AP Biology Anatomy & Physiology | Government and Economics | Health Occupations and Communications Health Science 1 Health Science 2 Health Science 3 - Certified Nursing |
|--|---|--|-----------------------------|--|

Other Courses to Consider

Med Terms and Ethics, Psychology, Sociology

Clubs / Activities

HOSA, Skills USA, FCCLA