



# Health Sciences Program of Study

## Proficiencies Needed to be Successful in Health Sciences:

### Math:

#### Modeling

- Use equations, inequalities and functions to model and interpret situations.

#### Number and Quantity

- Reason quantitatively and use units to solve problems.

#### Algebra

- Understand solving equations as a process of reasoning and explain the reasoning.

#### Functions

- Interpret expressions for functions in terms of the situation they model.

#### Geometry

- Visualize relationships between two-dimensional and three-dimensional objects.
- Apply geometric concepts in modeling situations.

#### Statistics and Probability

- Understand and evaluate random processes underlying statistical experiments.

### Life Sciences:

- Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. (HS-LS1-3)
- Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring. (HS-LS3-1)

### Health Education:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills; to advocate for personal, family and community health to enhance health and avoid or reduce health risks.
- Demonstrate the ability to use decision-making skills and goal setting to enhance health
- Demonstrate the ability to practice health enhancing behaviors and avoid or reduce health risks.

### English Language Arts:

#### Reading

- Evaluate content and multiple sources of information presented in diverse media and formats to address a question or solve a problem.
- Integrate information from diverse sources into a coherent understanding of an idea or event, noting discrepancies among sources.

#### Writing

- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- Use technology to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
- Collect relevant information from multiple print and digital sources, using effective research and onlinerearch methods, and determine the credibility and accuracy of the sources while assessing the strengths and limitations of each source for the specific task, purpose, and audience.
- Integrate information into the text selectively and purposefully to maintain the flow of ideas, while following a standard citation format and avoiding plagiarism and overreliance on any one source.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.

#### Speaking and Listening

- Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
- Integrate multiple sources of information presented in diverse formats and media to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
- Develop a clear line of reasoning.
- Use appropriate organization, development, style, and substance appropriate to a range of purposes and audiences for both formal and informal tasks.

## Education and Career Pathways out of Health Sciences:

### Post-Secondary Education:

Recent graduates have attended many colleges, including: Castleton University, Colby Sawyer College, Norwich University, River Valley Community College, University of Vermont and Vermont Technical College.

### Certifications/Licenses:

- Licensed Nursing Assistant- LNA
- Certified Clinical Medical Assistant-CCMA
- Certified Patient Care Technician-CPCT
- Certified Clinical Phlebotomy Technician
- Certified Professional Coder- CPC
- Dental Assistant
- Pharmacy Technician

### Apprenticeships and Cooperative Education:

- Cooperative Education or Job Shadows are typically available at local health care, long-term care, dentistry, and veterinary offices and facilities.

### Employability:

#### Diagnostic Services:

- Radiologic Technicians, Sonographers, Surgical Assistants

#### Therapeutic Services:

- Nursing, Dental Hygienist, Dentist, Medical Assistant, Physician Assistant, Physician, Athletic Training, Physical Therapy, Occupational Therapy, Nutrition & Wellness Studies, Pharmacists, Respiratory Therapy, Speech Language Pathology, Sports Medicine, Veterinarian

#### Support Services:

- Medical Assistants, Veterinary Assistants, Speech-language pathology Assistant

#### Health Informatics:

- Medical Records and Health Information Technicians, Medical Secretaries, Medical Transcriptionists

#### Biotechnology research and development:

- Biomedical Engineer, Medical Scientists