**Health Science: Therapeutic Services**  
**Career Pathway Plan of Study for ▶ Learners ▶ Parents ▶ Counselors ▶ Teachers/Faculty**

This Career Pathway Plan of Study (based on the Therapeutic Services Pathway of the Health Science Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. *This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

### EDUCATION LEVELS

<table>
<thead>
<tr>
<th>GRADE</th>
<th>English/Language Arts</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies/Sciences</th>
<th>Other Required Courses</th>
<th>*Career and Technical Courses and/or Degree Major Courses for Therapeutic Services Pathway</th>
<th>SAMPLE Occupations Relating to This Pathway</th>
</tr>
</thead>
</table>
| 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 | Occupations Requiring Less than Baccalaureate Degree  
Anesthesiologist Assistant  
Certified Nursing Assistant  
Clinical Medical Assistant  
Data Entry Coordinator  
Dental Assistant/Hygienist  
Dental Lab Technician  
EMT/Paramedic  
Home Health Aide  
Licensed Practical Nurse  
Massage Therapist  
Orthotist/Prosthetist  
Pharmacist/Pharmacy Technician  
Physical Therapist/Assistant  
Radiologic Technician  
Registered Nurse  
Respiratory Therapist  
Surgical Technician |
| 10    | English/Language Arts II | Geometry      | Chemistry        | U.S. History            | Health Science II: Health, Safety and Ethics in the Health Environment | Health Science III: Employment in Health Occupations | |
| 11    | English/Language Arts III | Algebra II    | Physics or other science course | World History Sociology | Health Science IV: Introduction to Therapeutic Services | |
|       | College Placement Assessments - Academic/Career Advisement Provided |       |                  |                         | Articulation/Dual Credit Transcripted - Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes. | |
| 12    | English/Language Arts IV | Pre-Calculus or Calculus or Statistics | Anatomy and Physiology | Psychology Economics | Year 13 | English Composition | Algebra | Chemistry | Biological Science | American Government Psychology | Health Science V: Therapeutic Services Preparation | |
|       | Year 14 | Speech/Oral Communication        | Technical Writing | Statistics or Calculus | Microbiology | American History Sociology | Year 15 | Continue courses in the area of specialization. | |
|       | Year 15 |                               |                  |                         |                         |                         | Year 16 | Complete Therapeutic Services Major (4-Year Degree Program) | |

**Interests Inventory Administered and Plan of Study Initiated for all Learners**

**College Placement Assessments - Academic/Career Advisement Provided**

**Articulation/Dual Credit Transcripted - Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes.**
Creating Your Institution’s Own Instructional Plan of Study

With a team of partners (secondary/postsecondary teachers and faculty, counselors, business/industry representatives, instructional leaders, and administrators), use the following steps to develop your own scope and sequence of career and technical courses as well as degree major courses for your institution’s plan of study.

1. Crosswalk the Cluster Foundation Knowledge and Skills (available at [http://www.careerclusters.org/goto.cfm?id=89](http://www.careerclusters.org/goto.cfm?id=89)) to the content of your existing secondary and postsecondary programs/courses.

2. Crosswalk the Pathway Knowledge and Skills (available at [http://www.careerclusters.org/goto.cfm?id=37](http://www.careerclusters.org/goto.cfm?id=37)) to the content of your existing secondary/postsecondary programs and courses.

3. Based on the crosswalks in steps 1 and 2, determine which existing programs/courses would adequately align to (cover) the knowledge and skills. These programs/courses would be revised to tighten up any alignment weaknesses and would become a part of a sequence of courses to address this pathway.

4. Based on the crosswalks in steps 1 and 2, determine what new courses need to be added to address any alignment weaknesses.

5. Sequence the content and learner outcomes of the existing programs/courses identified in step 3 and new courses identified in step 4 into a course sequence leading to preparation for all occupations within this pathway. (See list of occupations on page 1 of this document.)

6. The goal of this process would be a series of courses and their descriptions. The names of these courses would be inserted into the Career and Technical Courses column on the Plan of Study on page 1 of this document.

7. Below is a sample result of steps 1-6, and these course titles are inserted into the Plan of Study on page 1 of this document.

8. Crosswalk your state academic standards and applicable national standards (e.g., for mathematics, science, history, language arts, etc.) to the sequence of courses formulated in step 6.
Health Science: Therapeutic Services

SAMPLE Sequence of Courses for Instructional Leaders Administrators Counselors Teachers/Faculty

Below are suggested courses that could result from steps 1-6 above. However, as an educational institution, course titles, descriptions and the sequence will be your own. This is a good model of courses for you to use as an example and to help you jump-start your process. Course content may be taught as concepts within other courses, or as modules or units of instruction.

These suggested instructional content sequences are organized as cumulative knowledge and skills specific for health science programs of study. Health Sciences I-III incorporate the basic knowledge and skills necessary for all healthcare occupations. Health Science IV is specific to a selected health science career pathway. The instructional content may be organized into courses consistent with the high school configuration. Health Science V includes instructional content necessary for career entry and is most often offered at a college or university level.

The following courses are based on the Cluster Foundation Knowledge and Skills found at http://www.careerclusters.org/goto.cfm?id=89. These knowledge and skills are reinforced and enhanced through participation in Health Occupations Students of America and work-based learning opportunities that are age and grade appropriate.

#1 Health Science I: Introduction to Health Science: Instructional content will focus on healthcare communications, leadership and teamwork, and will reinforce, expand and enhance biology content specific to human structure and function. Instruction will use interest inventories and observations to introduce students to careers in healthcare and will incorporate project- and problem-based healthcare practices and procedures to demonstrate the criticality of these knowledge and skills. This course will build an understanding of the academic, communication and technical skills in all aspects of the industry. Students will learn how healthcare workers fit within the overall healthcare environment and will identify how key systems affect quality of care and other services they perform.

#2 Information Technology Applications: This course is designed for those students who have not mastered knowledge and skills related to technology applications prior to entry into high school. Students will use technology tools to manage personal schedules and contact information, create memos and notes, prepare simple reports and other business communications, manage computer operations and file storage, and use electronic mail, Internet applications and GIS to communicate, search for and access information. Students will develop skills related to word processing, database management and spreadsheet applications.

#3 Health Science II: Health, Safety and Ethics in the Health Environment: Instructional content will focus on healthcare safety, health maintenance practices, environmental safety processes and procedures, and ethical and legal responsibilities as well as reinforce, expand and enhance biology content specific to diseases and disorders. Instruction will incorporate project- and problem-based healthcare practices and procedures to demonstrate the criticality of these knowledge and skills. Students will develop basic technical skills required for all health career specialties including understanding occupational safety techniques and obtaining their CPR and First Aid certifications.

#4 Health Science III: Employment in Health Occupations: Instructional content will focus on healthcare information technology applications, employability and career development, and technical skill preparation. These knowledge and skills will provide guidance for career selection and application for both entry-level employment and postsecondary preparation. Instruction will incorporate project- and problem-based healthcare practices and procedures to demonstrate the criticality of these knowledge and skills.

The following courses expose students to Cluster Pathway Knowledge and Skills found at http://www.careerclusters.org/goto.cfm?id=37. These knowledge and skills are reinforced and enhanced through participation in Health Occupations Students of America and work-based learning opportunities that are age and grade appropriate.

#5 Health Science IV: Introduction to Therapeutic Services: Instructional content will introduce students to therapeutic services career options, opportunities, accompanying educational requirements, employment projections, therapeutic treatment planning and implementation, information collection, and monitoring and evaluating patient status. Instructional content will enhance, expand and reinforce intra-team communication and patient interaction as introduced in Health Science I. With input and participation of therapeutic services professionals, instructional content will incorporate project and problem-based therapeutic practices and procedures to demonstrate the criticality of these knowledge and skills. Students will study strategies for client interaction and learn how to explain planned procedures to patients and health professionals, including goals, side effects and coping strategies. Students will use various strategies to respond orally, and with written communication, to questions and concerns of patients within their scope of practice.

#6 Health Science V: Therapeutic Services Preparation: Instructional content for the therapeutic services major will be consistent with industry practices and protocols (specific to career selection) and licensure, certification and degree requirements. The content focuses on employing intra-team communications and collection of patient information. Students will learn how to communicate patient information among team members to allow for feedback as needed. Students will also learn facility protocol and regulatory guidelines for collecting patient information. Students will participate in identifying patient healthcare needs, strengths and problems, and respond appropriately. Students will develop an understanding of the purposes of the treatment plan and how to collaborate in planning procedures that support the goals for the patient according to facility protocol, regulatory guidelines, and within their scope of practice. Students will learn how therapeutic services professionals should monitor and assess patients' health status, and develop appropriate therapeutic responses. Students will also practice evaluating patient needs, strengths and problems in order to determine if treatment goals are being reached.