Developmental Education Courses *(if required)*

<table>
<thead>
<tr>
<th>English Placement</th>
<th>Math Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ ACLS025 Academic Reading and Writing Skills I</td>
<td>□ MATH 020 Pre-Algebra</td>
</tr>
<tr>
<td>□ ACLS026 Academic Reading and Writing Skills II</td>
<td>□ MATH 022 Elementary Algebra</td>
</tr>
<tr>
<td>□ ACLS050 Introduction to Academic Literacy</td>
<td>□ MATH 026 Intermediate Algebra</td>
</tr>
<tr>
<td>□ ENGL027 Writing Skills Workshop</td>
<td></td>
</tr>
</tbody>
</table>

**Pre Degree Requirements:**
Admission to the program is on a competitive basis. The minimum admission requirements to the program include:

- Completion of high school or GED equivalent
- Completion of high school biology with a lab component with a grade of B or better OR BIOS 115
- Completion of 2 units of high school algebra with C or better OR MATH 022 and MATH 026 OR MATH 028 with a C or better
- Submission of an application
- Submission of all official transcripts
- Completion of a Career Assessment Form (CAF)
- Minimum overall GPA of 3.0
- Competitive applicants will be interviewed by the program admission committee

Meeting the minimum admission requirements does not guarantee admission into the Sonography Program. Primary consideration will be given to applicants who have completed:

- College Algebra, Human Anatomy I & II with a B or better the first time a course is taken
- The general education courses that apply to the program

### Semester 1 (Fall)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Gen Ed</th>
<th>Term/Location Offered (Fall, Winter, Spring, Summer) (Bethlehem, Monroe, Fowler, Online)</th>
<th>Pre-requisites / Co-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ COLS101</td>
<td>College Success</td>
<td>1</td>
<td></td>
<td>FA, SP, SU; BETH, MROE, DIST</td>
<td></td>
</tr>
<tr>
<td>□ BIOS204</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
<td>Science</td>
<td>FA, SP, SU; BETH, MROE</td>
<td>PRE: One year of HS Biology or BIOS107 or 115</td>
</tr>
<tr>
<td>□ DMSG101</td>
<td>Essentials of Patient Care</td>
<td>2</td>
<td></td>
<td>FA; BETH</td>
<td></td>
</tr>
<tr>
<td>□ DMSG102</td>
<td>Intro to Diagnostic Medical Sonography</td>
<td>1</td>
<td></td>
<td>FA; BETH</td>
<td></td>
</tr>
<tr>
<td>□ DMSG103</td>
<td>Intro to Acoustic Physics</td>
<td>2</td>
<td></td>
<td>FA; BETH</td>
<td>PRE or CO: MATH 140</td>
</tr>
<tr>
<td>□ DMSG104</td>
<td>Intro to Clinical Education</td>
<td>1</td>
<td></td>
<td>FA; BETH</td>
<td></td>
</tr>
<tr>
<td>□ DMSG125</td>
<td>Sectional Anatomy for Medical Imagers</td>
<td>1</td>
<td></td>
<td>FA; BETH</td>
<td>PRE: BIOS204 CO: BIOS254</td>
</tr>
<tr>
<td>□ ENGL101</td>
<td>English I</td>
<td>3</td>
<td>Communication</td>
<td>FA, SP, SU; BETH, MROE, DIST</td>
<td>PRE: English Placement Policy</td>
</tr>
<tr>
<td>□ MATH140</td>
<td>College Algebra</td>
<td>3</td>
<td>QL</td>
<td>FA, SP, SU; BETH, MROE, DIST</td>
<td>PRE: MATH026 or Math Placement</td>
</tr>
</tbody>
</table>

**Total Semester Credits:** 18

### Semester 2 (Spring)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Gen Ed</th>
<th>Term/Location Offered</th>
<th>Pre-requisites/Co-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ BIOS254</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
<td>Science</td>
<td>FA, SP, SU; BETH, MROE</td>
<td>PRE: BIOS204 with a C or better</td>
</tr>
<tr>
<td>□ DMSG105</td>
<td>Acoustics Physics and Instrumentation I</td>
<td>2</td>
<td></td>
<td>SP; BETH</td>
<td>PRE: MATH140</td>
</tr>
<tr>
<td>□ DMSG110</td>
<td>Abdominal Sonography-Anatomy, Physiology, Imaging &amp; Critique I</td>
<td>4</td>
<td></td>
<td>SP; BETH</td>
<td>PRE: BIOS204 PRE or CO: BIOS254</td>
</tr>
<tr>
<td>□ DMSG115</td>
<td>OB &amp; GYN Sonography- Anatomy, Physiology, Imaging, &amp; Critique I</td>
<td>4</td>
<td></td>
<td>SP; BETH</td>
<td>PRE: BIOS204 PRE or CO: BIOS254</td>
</tr>
<tr>
<td>□ DMSG124</td>
<td>Clinical Education I</td>
<td>2</td>
<td></td>
<td>SP; Clinical Sites</td>
<td>PRE: DMSG104</td>
</tr>
</tbody>
</table>

**Total Semester Credits** 18
<table>
<thead>
<tr>
<th>Complete</th>
<th>Semester 3 (Summer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG174 Clinical Education II</td>
</tr>
<tr>
<td>☐</td>
<td>Elective</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Credits</strong></td>
</tr>
<tr>
<td>Complete</td>
<td>Semester 4 (Fall)</td>
</tr>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>☐</td>
<td>CMTH102 Introduction to Speech</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG155 Acoustic Physics and Instrumentation II</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG160 Abdominal Sonography – Anatomy, Physiology, Imaging, &amp; Critique II</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG163 Fundamentals of Fetal Scanning</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG224 Clinical Education III</td>
</tr>
<tr>
<td>☐</td>
<td>ENGL151L English II (Literature) (D)</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Credits</strong></td>
</tr>
<tr>
<td>Complete</td>
<td>Semester 5 (Spring)</td>
</tr>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG 165 OB &amp; GYN Sonography – Anatomy, Physiology, Imaging, &amp; Critique II</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG 215G Small Parts and Special Topics</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG 234 Clinical Education IV</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG 235 Introduction to Vascular Sonography</td>
</tr>
<tr>
<td>☐</td>
<td>PSYC 103 Introduction to Psychology</td>
</tr>
<tr>
<td>☐</td>
<td>SIT General Education Elective</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Credits</strong></td>
</tr>
<tr>
<td>Complete</td>
<td>Semester 6 (Summer)</td>
</tr>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>☐</td>
<td>DMSG244 Clinical Education V</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Credits</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Degree Credits</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- Human Anatomy and Physiology I is substituted for one of the Human Knowledge courses.
- Computer competencies are included in various courses in this program. Thus, completing the program automatically satisfies the computing requirement for the degree.
- Elective: All courses except: OXX-level courses; EARL 221, EARL 222.

**Societies & Institutions over Time (SIT) Electives**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Title</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMTH 221 History of Broadcasting</td>
<td>HIST 140 Modern Chinese History</td>
<td>POLS 105 American Constitutional Law (G-WI)</td>
</tr>
<tr>
<td>GEOG 101 World Geography</td>
<td>HIST 153 Found of Mod Euro History, 1300-1815 (G-WI)</td>
<td>POLS 110 American National Government (G-WI)</td>
</tr>
<tr>
<td>GEOG 151 Geography of the U.S. and Canada (G-WI)</td>
<td>HIST 163 American History II</td>
<td>POLS 150 Peace Studies &amp; Conflict Resolution (Study Abroad)</td>
</tr>
<tr>
<td>GLBL 133 Intro to Global Studies</td>
<td>HIST 165 The American Experience of Warfare</td>
<td>POLS 170 Politics of Modern Turkey (Study Abroad)</td>
</tr>
<tr>
<td>GLBL 160 Field Experience &amp; Acad Research in GS</td>
<td>HIST 166 Civil War and Reconstruction (G-WI)</td>
<td>POLS 202 International Relations</td>
</tr>
<tr>
<td>GLBL 230 Global Studies Capstone</td>
<td>HIST 168 History of the Middle East (G-WI)</td>
<td>POLS 205 Women and Politics (G-WI)</td>
</tr>
<tr>
<td>HIST 103 Ancient and Medieval History</td>
<td>HIST 173 Mod European History, 1815 to Present (G-WI)</td>
<td>POLS 251 State and Local Government (G-WI)</td>
</tr>
<tr>
<td>HIST 113 American History I (G-WI)</td>
<td>HIST 210 History of Mod Science, 1859 to Present</td>
<td>SDCA 102 Cultural Anthropology (G-WI)</td>
</tr>
<tr>
<td>HIST 121 The Black Experience (G-WI)</td>
<td>HIST 211 History of Pennsylvania</td>
<td>SOCA 105 American Ethnicity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POLS 101 Introduction to Political Science</td>
</tr>
</tbody>
</table>

**Note:** General Education courses offered as writing intensive are noted with a G-WI.
Program Narrative:

- With America's growing and aging population, the healthcare sector continues to offer growth in employment opportunities. Sonography is a key part of today's advanced medical practices, and qualified sonography graduates from Northampton find good-paying, flexible and rewarding positions throughout the country. Completion of the program requirements of Northampton’s Associate in Applied Science (AAS) degree allows the graduate the opportunity to sit for the American Registry of Diagnostic Medical Sonographer’s (ARDMS) examination.

- NCC’s sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS).

Program Learning Outcomes:

- To prepare competent entry level general sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
  - with a broad knowledge base that enables them to embrace life-long learning.
  - who are able to adapt to ever-changing technology in the health care industry.
  - who are competent to pass the certification examination.
  - who meet or exceed the needs of their employers.

Career Potential:

- Sonographer (RDMS), Echocardiographer (RDCS), Vascular Technologist (RVT)

Transfer Potential:

- Thomas Jefferson University, Misericordia University and Adventist University of Health Sciences.

Diagnostic Medical Sonography
Commission on Accreditation of Allied Health Education Programs (CAAHEP)
25400 U.S. Highway 19 North, Suite 158
Clearwater, FL 33763
Phone: (727) 210-2350   Fax: (727) 210-2354   www.caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography
6021 University Blvd, Suite 500
Ellicott, MD 21043
Phone: (443) 973-3251   Fax: (866) 738-3444   www.jrcdms.org   magat@jrcdms.org