

# SCIENCE TRANSFER OPPORTUNITIES

Taking these courses does not insure that all first two-year requirements have been met; nor will it guarantee acceptance in all programs at all institutions. For additional information, please contact the HCCC Transfer Office.

## **Biology:**

This sequence is designed for transfer study in the biological sciences. Completion of a B.S. degree can lead to a career in industry, research, government or teaching in the fields of agriculture, biochemistry, ecology, environmental sciences, forestry, marine science, medicine and others. Biology serves as the major discipline for many specialized areas.

Students enrolled in this program transfer to Cornell University, SUNY College of Environmental Science and Forestry at Syracuse, other SUNY four-year units and private colleges such as Utica College.

Students who desire to transfer to a four-year college to prepare for a career in Biology are advised to take the following courses:

MA 245	Analytic Geometry and Calculus I
SC 155	Biological Science I
SC 143	Animal Biology, SC 145 Plant Biology I – Botany, or SC 156 Biological Science II
SC 153-154	General Chemistry I & II
SC 211	Microbiology I or SC 261 Ecology
SC 225-226	Organic Chemistry I & II
SC 255	Genetics

## **Chemistry:**

The Chemistry emphasis is suggested for students interested in transferring to four-year institutions in the field of chemistry or closely allied fields. The baccalaureate degree in chemistry can lead to careers in such areas as chemical research, chemical engineering or chemical education.

Students who desire to transfer to a four-year college to prepare for a career in Chemistry are advised to take the following sequence:

MA 245	Analytic Geometry and Calculus I
SC 153-154	General Chemistry I & II
SC 225-226	Organic Chemistry I & II

Other Laboratory Science electives as required.

## **Chiropractic:**

Successful completion of designated coursework at HCCC will meet degree requirements for the A.S. degree and will satisfy all prerequisite coursework to gain first year standing within the professional program at New York Chiropractic College.

MA 132	College Algebra and Trigonometry
SC 153-154	General Chemistry I & II
SC 155	Biological Science I
SC 156	Biological Science II
SC 225-226	Organic Chemistry I & II

Additional electives in Biology and Social Sciences will be determined after consultation with the student's advisor.

## **Environmental Science and Forestry:**

This sequence is designed for transfer study in a variety of forestry occupations including:

- Biochemistry, environmental chemistry and natural and synthetic polymer chemistry
- Ecology, entomology, environmental biology, fish and wildlife biology, forest pathology, plant sciences or zoology
- Pre-medicine
- Forest management, land planning or landscape architecture

Students enrolled in this sequence transfer to the SUNY College of Environmental Science and Forestry at Syracuse, SUC at Plattsburgh, SUC at Cortland or other SUNY four-year institutions. Students should see their advisor to customize their courses to match their intended field. Students will typically take the following courses:

MA 141	Pre-Calculus Mathematics and/or
MA 245	Analytic Geometry and Calculus I
SC 155	Biological Science I
SC 143	Animal Biology, SC 145 Plant Biology I – Botany, or SC 156 Biological Science II
SC 258	Environmental Science

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Additional electives in Biology, Chemistry, and/or Physics will be determined after consultation with the student's advisor.

**Exercise Science:**

This emphasis is designed for transfer into an athletic training program at a four-year institution. Admission to a four-year school is not guaranteed. A minimum GPA of 3.6 to 3.8 and the following electives are recommended:

SC 153 & 154	General Chemistry I & II
SC 133 & 134	College Physics I & II
MA 245	Analytic Geometry and Calculus I
MA 128	Mathematical Statistics II
SC 253 & 254	Anatomy & Physiology I & II
SC 217	Exercise Science
PE 101 & 102	Clinical Experience in Athletic Training I & II
PE 201 & 202	Field Experience in Athletic Training I & II

**Forest Technology:**

Students who desire to transfer to the Ranger School in Wanakena, N.Y. to prepare for a career in Forest Technology are advised to take the following courses. Taking these courses does not guarantee acceptance to the Ranger School.

EN 171	Introduction to Technical Writing
MA 130	Intermediate Algebra
MA 132	College Algebra and Trigonometry
MA 141	Pre-Calculus Mathematics
SC 145	Plant Biology I - Botany
SC 155	Biological Science I
SC 156	Biological Science II
SC 161	Physical Geology
SC 261	Ecology
SS 186	Introduction to Microeconomics

**Pharmacy:**

This emphasis is designed for transfer into a professional program at a four-year institution. Transfer is not guaranteed. Students must work closely with their advisors.

MA 245	Analytic Geometry and Calculus I
SC 153-154	General Chemistry I & II
SC 155	Biological Science I
SC 156	Biological Science II, SC 143 Animal Biology, or SC 145 Plant Biology I - Botany
SC 211	Microbiology I
SC 225-226	Organic Chemistry I & II
SS 151	Introductory Psychology

**Physical Therapy:**

This emphasis is designed to assist students seeking entry into SUNY Health Science Center at Syracuse. Transfer to other institutions is possible. The program is highly competitive and transfer admission is limited (GPA 3.5 or above). Students must work closely with their academic advisors. Admission to SUNY Health Science Center at Syracuse is not guaranteed.

Students who desire to transfer to a four-year college to prepare for a career in Physical Therapy are advised to take the following courses:

HE 128	First Aid and Basic CPR or Current Certification
MA 141	Pre-Calculus Mathematics or MA 245 Analytic Geometry & Calculus I
SC 133-134	College Physics I & II
SC 153-154	General Chemistry I & II
SC 155	Biological Science I
SC 156	Biological Science II or SC 143 Animal Biology
SS 151	Introductory Psychology
SS 152	Developmental Psychology

Volunteer or work experience in a physical therapy department is required.

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**Physics:**

Students who desire to transfer to a four-year college to prepare for a career in Physics are advised to take the following electives:

MA 245-246-247	Analytic Geometry & Calculus I, II and III, or Chemistry Electives
SC 133-134	College Physics I & II

**Radiologic Technology:**

This is designed to provide students who have completed or who plan to enter approved programs in Radiologic Technology an opportunity to earn the Associate in Science Degree. A year of transfer credit will be given to students who have successfully completed their professional training.

MA 127	Mathematical Statistics I
MA 132	College Algebra and Trigonometry
SC 141	Fundamentals of Biology I
SC 253-254	Anatomy & Physiology I & II
SS Elective	American History, Western Civilization, or Other World Civilizations categories
HU Elective	Humanities or The Arts category

**Science Education:**

Students who desire to transfer to a four-year college to prepare for a career in teaching Biology, Chemistry, Earth Science, General Science or Physics are advised to take the following electives:

*MA 141	Pre-Calculus Mathematics and/or *MA 245 Analytic Geometry and Calculus I
SC 133	College Physics I
SC 143/SC 145	Animal Biology or Plant Biology I - Botany
SC 153-154	General Chemistry I & II and/or SC 155-156 Biological Science I & II

\*MA requirements may vary from institution to institution.

Additional electives in Biology, Chemistry, and/or Physics will be determined after consultation with the student's advisor.

Students interested in transferring to a four-year college to prepare for a career in the following areas should see their advisor:

Conservation	Engineering Technology	General Science
Medical Laboratory Technology	Medical Technology	