

## SECONDARY EDUCATION AND SPECIAL EDUCATION

In planning for secondary or special education, students must follow the recommended course of study provided by the transfer institution. Consult the transfer institution of choice for requirements as early as possible for course selection recommendations.

To become a state certified teacher in Michigan, a student must obtain a bachelor's degree, pass the Basic Skills Michigan Test for Teacher Certification and, before receiving their teaching certificate, pass the Michigan Content Test in their major and minor(s).

Students must investigate the teacher education program at their intended transfer institution to be sure they offer the desired major and minor as well as the requirements to obtain teacher certification from the institution of choice. Each 4-year institution offers teacher certification in particular subject areas. All teacher education students are encouraged and welcome to attend the teacher education forums and events and activities at JCC.

Some students may desire to obtain an associate degree from JCC although this is not a requirement for admission into a 4-year program. To graduate with a General Education Associate in Arts degree from JCC, a student must complete the degree requirements. Review the requirements in the catalog for the Associate in Arts degree.

*Check your teacher education transfer institution for transferability of all courses.*

*See respective areas for course descriptions.*

## NATURAL RESOURCES & AGRISCIENCE CAREER PATHWAY

Careers in this pathway are related to agriculture, the environment and natural resources. These include agricultural sciences, earth sciences, environmental sciences, fisheries, forestry, horticulture and wildlife.

## TRANSFER PROGRAMS

The first two years of college education usually consists of general education courses, introductory courses in a major and/or program of study, and selected electives. Refer to pages 38-40 for additional information on transfer and MACRAO. Academic advisors assists in planning a student's transfer program. They can also provide transfer guide sheets indicating courses that meet the requirements of various programs of study at four-year colleges. Sample curricula for a few popular transfer programs are included.

- Biology
- Mathematics

## BIOLOGY

Biology, the study of living organisms, is an exciting, dynamic field that offers the opportunity to study and explore animals, plants and bacteria under a wide range of conditions in the laboratory and outdoors. Biologists work in such widely varying areas as medicine, crop improvement, wildlife management, forensics, toxic waste management, environmental preservation and education.

### SAMPLE CURRICULUM FOR BIOLOGY MAJOR

#### First Year, Fall Semester

BIO 131, CEM 141, MTH 140, ENG 131

#### First Year, Winter Semester

BIO 152, CEM 142, MTH 151\*, ENG 132

#### First Year, Spring Semester

MACRAO Social Science and Humanities courses

#### Second Year, Fall Semester

BIO 151, CEM 241, PHY 231, CPS 175\*

#### Second Year, Winter Semester

CEM 242, PHY 232, MACRAO Social Science and Humanities courses

*\*Not required by all transfer institutions.*

## MATHEMATICS

Students interested in the field of mathematics may major in mathematics or statistics. Mathematics majors find careers in applied mathematics and education. Statistics majors work in such areas as computer science, management, and accounting.

### SAMPLE CURRICULUM FOR MATHEMATICS

#### First Year, Fall Semester

ENG 131, MTH 151, CPS 175\*, PSY 140

#### First Year, Winter Semester

ENG 132, MTH 154, MTH 133\*\*, CPS 177, ECN 231

#### Second Year, Fall Semester

MTH 251, PHY 251, PHL 231, MACRAO Social Science course

#### Second Year, Winter Semester

MTH 254, PHY 252, MACRAO Humanities courses

*\*Not required but recommended to prepare for CPS 177*

*\*\*MSU students should register for PSY 143*