# Transfer from SUNY JEFFERSON to SUNY POTSDAM



ACADEMIC MAJOR ADVISING GUIDE

This advising guide is intended to assist faculty and students with introductory major course selection at SUNY Jefferson. Although not specifically required as prerequisites for admission to SUNY Potsdam, it is recommended that JCC students complete the courses indicated for their intended major prior to transferring. This will insure that introductory major course work required for enrollment in upper-division (300/400 level) courses has been completed and that students have the opportunity to complete the B.A. or B.S. degree in two years of additional full-time study at Potsdam. Additional major courses, beyond those specifically recommended, may also be completed at JCC prior to transferring.

Students transferring to Potsdam to complete a major that has no introductory course work available at JCC will need additional time to complete their degree after transferring.

Non-major courses with grades of "D" or higher are acceptable for transfer. Grades of "C" or higher must be earned in each course to be applied toward the major or toward major cognate requirements (this policy is identical for courses taken at Potsdam).

Students transferring directly to Potsdam with a JCC A.A. or A.S. degree, having completed 30 semester hours of general education including 7 out of 10 SUNY General Education requirements, will be exempt from any additional Potsdam General Education Foundations and Modes of Inquiry requirements not already satisfied. The 7 out of 10 General Education requirements must include Basic Communication and Mathematics.

This document was developed in order to provide a seamless two-plus-two transfer opportunity that reduces unnecessary repetition of general education and curricular content. It follows SUNY Transfer Paths and complies with SUNY General Education requirements thereby enabling students to complete their intended program of study on time, without unnecessary cost and/or duplication of effort.

Specific academic advising is available from:

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# SUNY JEFFERSON/SUNY POTSDAM MAJOR ADVISING GUIDE

#### October 2014

# **ANTHROPOLOGY**

Recommended JCC degree: A.A. Liberal Arts and Sciences – Humanities and Social Sciences including the following courses:

ANT 142 Introduction to Archaeology

ANT 143 Cultural Anthropology

ANT 145 Physical Anthropology

MTH 144 Elementary Statistics -or- MTH 174 Mathematical Probability and Statistics I (recommended, not required)

FRE 222 Intermediate French II -or- GER 222 Intermediate German II -or- SPA 222 Intermediate Spanish II (recommended, not required)

# **ARCHAEOLOGICAL STUDIES**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ANT 142 Introduction to Archaeology

ANT 143 Cultural Anthropology (recommended, not required)

ANT 145 Physical Anthropology (recommended, not required)

ART 113 History of Western Art I

ART 114 History of Western Art II

**GEO 131 Physical Geology** 

**GEO 132 Historical Geology** 

MTH 144 Elementary Statistics -or- MTH 174 Mathematical Probability and Statistics I (recommended, not required)

# ART EDUCATION (ART STUDIO MAJOR with K-12 certification)

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ART 113 History of Western Art I

ART 114 History of Western Art II

**ART 117 Basic Drawing** 

ART 125 Three-Dimensional Design

ART 217 Intermediate Drawing

ART 242 Color, Line and Design

**EDU 210 Principles of Education** 

PSY 133 Introduction to Psychology (recommended, not required)

#### **ART HISTORY**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences

including the following courses:

ART 113 History of Western Art I

ART 114 History of Western Art II

ART 117 Basic Drawing -or- ART 242 Color, Line and Design

# **ART STUDIO**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ART 113 History of Western Art I

ART 114 History of Western Art II

ART 117 Basic Drawing

ART 125 Three-Dimensional Design

**ART 217 Intermediate Drawing** 

ART 242 Color, Line and Design

# **BIOCHEMISTRY**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

BIO 131 Principles of Biology I

BIO 132 Principles of Biology II

**BIO 200 Genetics** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

CHE 212 Organic Chemistry II

MTH 221 Calculus I

MTH 222 Calculus II

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

# **BIOLOGY (BA degree)**

BIO 131 Principles of Biology I

BIO 132 Principles of Biology II

**BIO 200 Genetics** 

BIO 201 Ecology

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

# **BIOLOGY (BS degree)**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

BIO 131 Principles of Biology I

BIO 132 Principles of Biology II

**BIO 200 Genetics** 

**BIO 201 Ecology** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

CHE 212 Organic Chemistry II (strongly recommended, not required)

MTH 221 Calculus I

MTH 174 Mathematical Probability and Statistics I -or- MTH 222 Calculus II

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

# **BUSINESS ADMINISTRATION**

Recommended JCC degree: A.S. Business Administration including the following courses:

ACC 101 Accounting Principles I

**ACC 102 Accounting Principles II** 

**BUS 124 Marketing** 

**BUS 131 Principles of Management** 

BUS 211 Business Law I

BUS 221 Human Resource Management (recommended, not required)

BUS – choose additional business administration major courses under advisement

**ECO 101 Macroeconomics** 

**ECO 102 Microeconomics** 

MTH 174 Mathematical Probability & Statistics I (MTH 144 Elem. Statistics may be substituted)

#### **BUSINESS ECONOMICS**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ACC 101 Accounting Principles I (recommended, not required)

ACC 102 Accounting Principles II (recommended, not required)

**ECO 101 Macroeconomics** 

**ECO 102 Microeconomics** 

**ENG 221 Writing Literary Nonfiction** 

MTH 174 Mathematical Probability & Statistics I (MTH 144 Elem. Statistics may be substituted)

# **CHEMISTRY (BA degree)**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

CHE 212 Organic Chemistry II

MTH 221 Calculus I

MTH 222 Calculus II

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

# **CHEMISTRY (BS degree)**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

CHE 212 Organic Chemistry II

MTH 221 Calculus I

MTH 222 Calculus II

MTH 241 Calculus III

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

# **COMMUNICATION (SPEECH)**

ENG 102 Composition and Literature ENG 221 Writing Literary Nonfiction STA 151 Public Speaking

# **COMMUNITY HEALTH**

Community Health major courses are not available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences -or- A.S. Human Services including the following courses:

HEA 101 Personal and Community Health (recommended, not required)

**BIO 106 Human Biology** 

BIO 203 Anatomy and Physiology I (recommended, not required)

MTH 174 Mathematical Probability & Statistics I (MTH 144 Elem. Statistics may be substituted)

# <u>COMPUTER SCIENCE (BA degree – Computer Science track)</u>

Recommended JCC degree: A.S. Computer Science -or- A.S. Liberal Arts and Sciences -

Mathematics and Science including the following courses:

CIS 216 Advanced Programming

CIS 221 Computer Architecture

CIS 225 Assembly Language

CIS 250 Data Structures

MTH 174 Mathematical Probability and Statistics I

MTH 221 Calculus I

MTH 222 Calculus II

# **COMPUTER SCIENCE (BA degree – Information Systems track)**

Recommended JCC degree: A.S. Computer Information Systems **-or-** A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

CIS 216 Advanced Programming

CIS 221 Computer Architecture

CIS 225 Assembly Language

CIS 250 Data Structures

MTH 174 Mathematical Probability and Statistics I

MTH 221 Calculus I

Business Administration minor (choose two to three minor courses under advisement)

# **COMPUTER SCIENCE (BS degree)**

Recommended JCC degree: A.S. Computer Science -or- A.S. Liberal Arts and Sciences -

Mathematics and Science including the following courses:

CIS 216 Advanced Programming

CIS 221 Computer Architecture

CIS 225 Assembly Language

CIS 250 Data Structures

MTH 174 Mathematical Probability and Statistics I

MTH 221 Calculus I

MTH 222 Calculus II

MTH 241 Calculus III -or- MTH 245 Linear Algebra

Choose one science (two course sequence) from the following:

BIO 131 and 132 General Biology I and II

CHE 131 and 132 General Chemistry I and II

PHY 143 and 144 Science and Engineering Physics I and II

# **CRIMINAL JUSTICE**

Recommended JCC degree: A.S. Criminal Justice -or- A.A. Liberal Arts and Sciences -

Humanities and Social Sciences including the following courses:

CRJ 101 Introduction to Criminal Justice

CRJ 102 Criminal Administration Procedures

CRJ 110 Criminal Evidence

CRJ – choose additional criminal justice major courses under advisement

MTH 174 Mathematical Probability & Statistics I (MTH 144 Elem. Statistics may be substituted)

PHI 101 Introduction to Philosophy (recommended pre-requisite course)

POL 121 Introduction to American Government

PSY 133 Introduction to Psychology

**SOC 144 Introduction to Sociology** 

SOC 245 Criminology

#### **DANCE**

Dance major courses are not available at Jefferson.

# **ECONOMICS**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

**ECO 101 Macroeconomics** 

**ECO 102 Microeconomics** 

**ENG 221 Writing Literary Nonfiction** 

MTH 174 Mathematical Probability & Statistics I (MTH 144 Elem. Statistics may be substituted)

# **ENGLISH: CREATIVE WRITING (BA degree)**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences - Creative Writing Emphasis including the following courses:

**ENG 220 Creative Writing** 

**ENG 221 Writing Literary Nonfiction** 

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II -or- ENG 209 Mythology

# **ENGLISH: CREATIVE WRITING (BFA degree)**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences - Creative Writing Emphasis including the following courses:

**ENG 220 Creative Writing** 

**ENG 221 Writing Literary Nonfiction** 

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II -or- ENG 209 Mythology

# **ENGLISH: LITERATURE**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences - Literature Emphasis including the following courses:

ENG 102 Composition and Literature (recommended, not required)

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II

ENG 209 Mythology

# ENGLISH: LITERATURE/WRITING (required for students seeking English Adolescence Education (GR 5-12) certification)

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ENG 102 Composition and Literature

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II

ENG 209 Mythology

**ENG 220 Creative Writing** 

# **ENGLISH: WRITING**

ENG 102 Composition and Literature (recommended, not required)

ENG 220 Creative Writing (recommended, not required)

**ENG 221 Writing Literary Nonfiction** 

# **ENVIRONMENTAL STUDIES**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

BIO 105 Environmental Biology (recommended, not required)

ENG 218 Technical and Professional Writing

**ENG 221 Writing Literary Nonfiction** 

GEO 105 Environmental Geology -or- GEO 131 Physical Geology

SCI 110 Energy and the Environment (recommended, not required)

# **FRENCH**

Limited French major courses are available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Sciences including the following course:

FRE 222 Intermediate French II

# **GEOLOGY (BA degree)**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

**GEO 131 Physical Geology** 

**GEO 132 Historical Geology** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

# **GEOLOGY (BS degree)**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

**GEO 131 Physical Geology** 

**GEO 132 Historical Geology** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

MTH 221 Calculus I

MTH 174 Mathematical Probability and Statistics I -or- MTH 222 Calculus II

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

#### **HISTORY**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences at including the following courses:

HIS 111 History of Western Civilization I -or- HIS 112 History of Western Civilization II

HIS 150 American History to 1877 -or- HIS 151 American History 1877 to Present

HIS – choose additional history major electives under advisement

# **MATHEMATICS**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

MTH 221 Calculus I

MTH 222 Calculus II

MTH 241 Calculus III

MTH 245 Linear Algebra

# MUSIC, MUSIC EDUCATION, MUSIC PERFORMANCE, MUSICAL STUDIES, BUSINESS of MUSIC

Music major courses are not available at Jefferson.

# **PHILOSOPHY**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

PHI 101 Introduction to Philosophy (recommended, not required)

PHI 221 Ethics

# **PHYSICS**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

PHY 143 Science and Engineering Physics I

PHY 144 Science and Engineering Physics II

PHY 145 Science and Engineering Physics III

CHE 131 General Chemistry I

CHE 132 General Chemistry II

MTH 221 Calculus I

MTH 222 Calculus II

# **POLITICAL SCIENCE**

POL 121 Introduction to American Government

POL 127 Introduction to Western Political Thought (recommended, not required)

MTH 174 Math Probability and Statistics I (MTH 144 Elementary Statistics may be substituted)

# **PSYCHOLOGY**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences -or-A.S. Human Services including the following courses:

**PSY 133 Introduction to Psychology** 

PSY – choose additional psychology major electives under advisement

MTH 174 Math Probability and Statistics I (MTH 144 Elementary Statistics may be substituted)

#### **SOCIOLOGY**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences - or-A.S. Human Services including the following courses:

**SOC 144 Introduction to Sociology** 

SOC – choose additional sociology major electives under advisement

MTH 174 Math Probability and Statistics I (MTH 144 Elementary Statistics may be substituted)

# **SPANISH**

Limited Spanish major courses are available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following course: SPA 222 Intermediate Spanish II

# **THEATRE**

Theatre major courses are not available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Sciences including the following courses: ENG 225 Shakespeare's Plays (recommended, not required)

# **THEATRE EDUCATION (K-12 certification)**

Theatre Education major courses are not available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses: EDU 210 Principles of Education

ENG 225 Shakespeare's Plays (recommended, not required)

PSY 220 Child and Adolescent Development

#### VISUAL ARTS (BFA degree)

ART 113 History of Western Art I

ART 114 History of Western Art II

ART 117 Basic Drawing

ART 125 Three-Dimensional Design

**ART 217 Intermediate Drawing** 

ART 242 Color, Line and Design

# **WOMEN'S and GENDER STUDIES**

Women's and Gender Studies major courses are not available at JCC. Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ENG 186 Women in Literature (recommended, not required)

HIS 217 History of Women in America (recommended, not required)

# **EDUCATION CERTIFICATION MAJORS**

# CHILDHOOD/EARLY CHILDHOOD EDUCATION (BIRTH – GRADE 6)

Recommended JCC degree: A.A. Liberal Arts and Sciences – Childhood Education (Jointly Registered Program with SUNY Potsdam) including as many of the following courses as possible: EDU 210 Principles of Education

ART 117 Basic Drawing -or- ART 242 Color, Line and Design -or- MUS 100 Fundamentals of Music -or- MUS 101 Music Theory -or- STA 183 Introduction to Acting

ART 113 History of Western Art I -or- ART 114 History of Western Art II -or- ART 115 Art Appreciation I -or- ART 116 Art Appreciation II -or- MUS 115 Music Appreciation

BIO 111 General Biology I -or- BIO 131 Principles of Biology I

CHE 107 Introduction to Chemistry I -or- CHE 131 General Chemistry I -or- PHY 131 General Physics I

GEG 101 Introduction to World Geography

GEO 110 Earth Sciences -or- GEO 131 Physical Geology

ENG 101 Research and Composition

ENG 102 Composition and Literature

HIS 150 American History to 1877

HIS 151 American History 1877 to Present

MTH 144 Elementary Statistics -or- MTH 174 Mathematical Probability and Statistics I

MTH 148 Mathematical Reasoning for Elementary Teachers I

MTH 149 Mathematical Reasoning for Elementary Teachers II

PSY 220 Child and Adolescent Development

STA 151 Public Speaking

#### Modern Language:

Four years of the same foreign language at the high school level satisfy the modern language requirement at Potsdam. Students who have not completed four years in high school should place into JCC's language sequence at the appropriate level and complete the language sequence through ASL 221, FRE 221, GER 221 or SPA 221. If the language requirement was completed in high school, HIS 111 and 112 History of Western Civilization I and II may be substituted.

SPECIALIZATION AREAS for Childhood/Early Childhood Majors: Students must choose <u>one</u> specialization area from the following: Biology, Chemistry, English, Geology, Mathematics,

# Physics or Social Studies/History. The Specialization will be started at JCC and completed at the upper-division level at Potsdam.

#### Biology Specialization:

BIO 131 Principles of Biology I (recommended, not required)

BIO 132 Principles of Biology II

BIO 200 Genetics -or- BIO 201 Ecology

# **Chemistry Specialization:**

CHEM 131 General Chemistry I

CHEM 132 General Chemistry II

#### **English Specialization:**

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II -or- ENG 209 Mythology

ENG 220 Creative Writing -or- ENG 221 Writing Literary Nonfiction

ENG 114 Early Childhood Literature -or- ENG 214 Survey of Children's Literature

# **Geology Specialization:**

GEO 131 Physical Geology (recommended, not required)

**GEO 132 Historical Geology** 

GEO 141 Astronomy -or- GEO 144 Meteorology

# Mathematics Specialization:

MTH 221 Calculus I

MTH 222 Calculus II

MTH 245 Linear Algebra

# **Physics Specialization:**

PHY 131 General Physics I

PHY 132 General Physics II

GEO 141 Astronomy -or- GEO 144 Meteorology

# Social Studies/History Specialization:

HIS 114 History of New York State

POL 121 Introduction to American Government

# ADOLESCENCE/SECONDARY EDUCATION CERTIFICATION MAJORS

# ADOLESCENCE EDUCATION (GRADES 7-12): BIOLOGY

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

BIO 131 Principles of Biology I

BIO 132 Principles of Biology II

**BIO 200 Genetics** 

**BIO 201 Ecology** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

GEO 110 Earth Sciences -or- GEO 131 Physical Geology -or- GEO 132 Historical Geology

PHY 131 General Physics I -or- PHY 143 Science and Engineering Physics I

PSY 133 Introduction to Psychology

PSY 220 Child and Adolescent Development

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# **ADOLESCENCE EDUCATION (GRADES 7-12): CHEMISTRY**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

CHE 131 General Chemistry I

CHE 132 General Chemistry II

CHE 211 Organic Chemistry I

CHE 212 Organic Chemistry II

BIO 106 Human Biology -or- BIO 111 General Biology I -or- BIO 112 General Biology II -or- BIO 131 Principles of Biology I -or- BIO 132 Principles of Biology II

GEO 110 Earth Sciences -or- GEO 131 Physical Geology -or- GEO 132 Historical Geology

MTH 221 Calculus I

MTH 222 Calculus II

PHY 143 Science and Engineering Physics I (PHY 131 General Physics I may be substituted)

PHY 144 Science and Engineering Physics II (PHY 132 General Physics II may be substituted)

PSY 133 Introduction to Psychology

PSY 220 Child and Adolescent Development

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same

# **ADOLESCENCE EDUCATION (GRADES 7-12): EARTH SCIENCE**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

**GEO 131 Physical Geology** 

**GEO 132 Historical Geology** 

GEO 141 Astronomy -or- GEO 144 Meteorology

**BIO 200 Genetics** 

CHE 131 General Chemistry I

CHE 132 General Chemistry II

**PSY 133 Introduction to Psychology** 

PSY 220 Child and Adolescent Development

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# ADOLESCENCE EDUCATION (GRADES 5-12): ENGLISH

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses :

ENG 102 Composition and Literature

ENG 201 Survey of British Literature I -or- ENG 202 Survey of British Literature II

ENG 209 Mythology

**ENG 220 Creative Writing** 

PSY 220 Child and Adolescent Development

STA 111 Introduction to Mass Communication

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# **ADOLESCENCE EDUCATION (GRADES 5-12): FRENCH**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

FRE 222 Intermediate French II

ART 113 History of Western Art I -or- ART 114 History of Western Art II

PSY 220 Child and Adolescent Development

STA 151 Public Speaking

# **ADOLESCENCE EDUCATION (GRADES 7-12): MATHEMATICS**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

MTH 174 Mathematical Probability and Statistics I

MTH 221 Calculus I

MTH 222 Calculus II

MTH 241 Calculus III

MTH 245 Linear Algebra

ENG 101 Research and Composition

ENG 102 Composition and Literature

PSY 220 Child and Adolescent Development

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# **ADOLESCENCE EDUCATION (GRADES 7-12): PHYSICS**

Recommended JCC degree: A.S. Liberal Arts and Sciences - Mathematics and Science including the following courses:

PHY 143 Science and Engineering Physics I

PHY 144 Science and Engineering Physics II

PHY 145 Science and Engineering Physics III

BIO 106 Human Biology -or- BIO 111 General Biology I -or- BIO 112 General Biology II -or- BIO 131 Principles of Biology I -or- BIO 132 Principles of Biology II

CHE 131 General Chemistry I

CHE 132 General Chemistry II

GEO 110 Earth Sciences -or- GEO 131 Physical Geology -or- GEO 132 Historical Geology

MTH 221 Calculus I

MTH 222 Calculus II

PSY 133 Introduction to Psychology

PSY 220 Child and Adolescent Development

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# **ADOLESCENCE EDUCATION (GRADES 5-12): SOCIAL STUDIES**

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

ANT 143 Cultural Anthropology

ECO 101 Macroeconomics -or- ECO 102 Microeconomics

HIS 111 History of Western Civilization I -or- HIS 112 History of Western Civilization II

HIS 114 History of New York State

HIS 150 American History to 1877

HIS 151 American History 1877 to Present

POL 121 Introduction to American Government

**PSY 133 Introduction to Psychology** 

PSY 220 Child and Adolescent Development

SOC 144 Introduction to Sociology

STA 151 Public Speaking

ASL 221 American Sign Language III -or- FRE 221 Intermediate French I -or- GER 221 Intermediate German I -or- SPA 221 Intermediate Spanish I -or- four years of the same foreign language completed at the high school level

# ADOLESCENCE EDUCATION (GRADES 5-12): SPANISH

Recommended JCC degree: A.A. Liberal Arts and Sciences - Humanities and Social Sciences including the following courses:

SPA 222 Intermediate Spanish II

ART 113 History of Western Art I -or- ART 114 History of Western Art II

PSY 220 Child and Adolescent Development

STA 151 Public Speaking