

## **BACHELOR OF SCIENCE DEGREE PROGRAMS**

### **BIOLOGY**

#### **EDUCATION**

EXCEPTIONAL STUDENT EDUCATION with ESOL

MIDDLE GRADES MATHEMATICS

SECONDARY MATHEMATICS

MIDDLE GRADES SCIENCE

SECONDARY BIOLOGY

#### **HUMAN SERVICES**

YOUTH & FAMILY STUDIES

ADDICTIONS STUDIES

HUMAN SERVICES GENERALIST

#### **NURSING**

## **BACHELOR OF APPLIED SCIENCE DEGREE PROGRAMS**

### **DIGITAL MEDIA**

GRAPHICS & WEB

GAMING & VIDEO

MODELING & SIMULATION

### **ORGANIZATIONAL MANAGEMENT**

ORGANIZATIONAL MANAGEMENT

PUBLIC SAFETY ADMINISTRATION

HEALTH CARE MANAGEMENT

## **BACHELOR'S DEGREES**

## BACHELOR OF SCIENCE DEGREE PROGRAMS

Indian River State College offers Bachelor's Degree programs in the following areas:

**The Bachelor of Science Degree in Education** is designed for students who wish to teach math or science at the middle school or high school level or who want to teach Exceptional Student Education (ESE). Students with an A.A. Degree are eligible to apply. Depending upon the specialization chosen, students will be well prepared to teach high school biology, middle school science, middle school and high school math or Exceptional Student Education at all levels. Students should complete all lower-division state-mandated program prerequisites, including the Education prerequisites of EDF 2005, Introduction to the Teaching Profession; EDF 2085, Introduction to Diversity and Exceptionalities for Educators; EME 2040, Introduction to Technology for Educators.

**The Bachelor of Science Degree in Nursing** is appropriate for graduates of an Associate in Science Degree in Nursing with a valid Florida R.N. license who desire to continue their education to the Bachelor's level. This degree prepares students for R.N. positions with leadership and management responsibilities. Students may complete required General Education courses before entering the program. Students who have completed the 72-credit Associate in Science Degree in Nursing, will complete an additional 18 credits for the Baccalaureate General Education requirement and 31 Baccalaureate in Nursing credits for a total of 121 credits to earn the degree.

**The Bachelor of Science Degree in Biology** is for students with an Associate in Arts Degree who are interested in pursuing careers and graduate education in the fields of life sciences, health sciences, and environmental sciences. Biology Baccalaureate Degree holders will also be well-prepared to continue their studies in professional schools of medicine, pharmacy, dentistry, or veterinary sciences. Students will transfer 60 credit hours from their A.A. Degree program and complete a total of 60 additional credit hours upon admission to the B.S. in Biology program for a total of 120 credit hours to earn the degree. Students must complete the following prerequisite courses with a grade of "C" or higher for admission to the program: General Biology I with lab, General Biology II with lab, General Chemistry I with lab, General Chemistry II with lab, Organic Chemistry I with lab, Organic Chemistry II with lab, Calculus I, and Statistics.

**The Bachelor of Science Degree in Human Services** allows students who hold an Associate in Science Degree in Human Services to focus on acquiring advanced knowledge, skills, and competencies in one of three areas of concentration – Youth and Family Studies, Addictions Studies, or General Human Services. Customized programs of study are also available for students with A.A. degrees and unrelated Associate degrees who are interested in this program. Graduates with a Bachelor's Degree in Human Services will find employment in a wide range of public, private, and nonprofit organizations focused on helping vulnerable populations and building stronger communities. A total of 120 credits are required for this degree.

**The Bachelor of Applied Science Degree in Organizational Management** is designed for candidates who hold an Associate in Science (A.S.) or an Associate in Applied Science (A.A.S.) Degree in a technical field and are motivated to continue their

education in preparation for career advancement. Students with an A.A. Degree may also be admitted with the approval of the Assistant Dean of Business Technology. This degree program is designed to prepare students for management level positions in a wide variety of career paths. Specializations include Organizational Management, Public Safety Administration and Health Care Management. Students may complete the required General Education courses before entering the program.

**The Bachelor of Applied Science Degree in Digital Media** is intended for students who have completed an Associate in Science Degree in Digital Media or Graphic Design who want to develop advanced skills and competencies in one of three areas of specialization – Graphics and Web Design, Gaming and Video, or Modeling and Simulation. Customized programs of study are also available for students with A.A. degrees and unrelated Associate degrees who are interested in this program. Graduates with a B.A.S. Degree in Digital Media can work in a wide variety of settings including entertainment, education, engineering, and business.

## **BACHELOR'S DEGREE REQUIREMENTS**

Students must earn at least twenty-five percent (25%) of the Baccalaureate Degree at IRSC. Students must successfully complete, with a GPA of 2.0 or higher, 36 hours of General Education credit (or equivalent) in the areas established by Indian River State College for its Baccalaureate Degree program.

Prior to completion of a Baccalaureate Degree at IRSC, students must demonstrate foreign language competence by providing evidence that documents the successful completion of two (2) credits of sequential high school foreign language instruction, or eight (8) credits of sequential postsecondary foreign language instruction. Students may demonstrate equivalent foreign language competence via the alternative methods specified by the Florida Department of Education including established minimum College Level Examination Program (CLEP) scores, minimum College Board MAPS Latin examination scores, or other methods as determined by IRSC. Indian River State College reserves the right to validate the foreign language competence of any student prior to awarding the Baccalaureate Degree through methods including, but not limited to, review of official transcripts, portfolio and performance reviews, competency testing, standardized testing, or other methods determined by IRSC that are designed to assess the foreign language competencies outlined in Rule 6A-10.02412 of the Florida Administrative Code.

**Requirements for graduation from the Bachelor of Science Degree in Education program are:**

1. Satisfactory completion of all three (3) parts of the Florida Teacher Certification Exam (FTCE).
2. Students must achieve a cumulative GPA of not less than a 2.5 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Successful completion of Student Teaching (MAE 4945, EEX 4940, or SCE 4941).
4. All Baccalaureate Education majors must achieve a grade of "C" or better in all content area courses within their declared Program of Study. Content

area courses are science courses for Secondary and Middle Grades Science Education majors, math courses for Secondary and Middle Grades Math majors, and exceptionalities courses for Exceptional Student Education with ESOL majors. Thus, a grade of "C" or higher is required for these courses:

- For Secondary Biology - ZOO 3303C, MCB 2010, MCB 2010L, BOT 3015, PCB 3063, PCB 4043, PCB 4043L.
  - For Middle Grades Science - BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, OCE 2013, OCE 3017, PCB 4043, PCB 4043L.
  - For Secondary Math - MAS 3105, MAP 3303, STA 2023, MTG 3212, MHF 4404, MAS 4203.
  - For Middle Grades Math - MAE 4815, STA 2023, MAE 3816, MHF 4404.
  - For ESE with ESOL - EEX 3103, EEX 4221, EEX 4601, EEX 4264, EEX 4265.
5. Upon completion of these requirements, the student will be eligible to apply for an initial Professional Teaching Certificate in the program area(s).

**Requirements for graduation from the Bachelor of Science Degree in Nursing program are:**

1. Students must successfully complete 121 hours of specified college-level credit courses in the degree program, including the 72 credits in the lower division Associate in Science Degree in Nursing and the additional 49 credit hours of Bachelor of Science in Nursing courses.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

**Requirements for graduation from the Bachelor of Science Degree in Biology program are:**

1. Students must successfully complete 120 hours of college-level courses in the degree program, including a minimum of 60 hours in the lower-division Associate in Arts Degree and 60 hours of specified Bachelor of Science Degree in Biology coursework.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.
3. Students must successfully complete the Senior Research Project with a grade of "C" or higher.

**Requirements for graduation from the Bachelor of Science Degree in Human Services program are:**

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and 45 hours of specified Bachelor of Science Degree in Human Services coursework.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

**Requirements for graduation from the Bachelor of Applied Science Degree in Organizational Management program are:**

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and the 42 hours of Bachelor of Applied Science Degree in Organizational Management coursework, including the capstone course.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

**Requirements for graduation from the Bachelor of Applied Science Degree in Digital Media program are:**

1. Students must successfully complete 120 credit hours of college-level courses in the degree program, including the lower-division Associate Degree, and 39 hours of specified Bachelor of Applied Science Degree in Digital Media coursework, including the capstone course.
2. Students must achieve a cumulative GPA of not less than a 2.0 on a 4.0 scale in all courses attempted (including transfer hours, but, excluding college preparatory courses) and in all courses attempted at Indian River State College.

## **BACHELOR'S DEGREE PROGRAM IN BIOLOGY**

### **BACHELOR OF SCIENCE IN BIOLOGY S0070 – 120 CREDITS**

Pursuing a career in biology opens the door to an unusually large number of immensely rewarding and exciting career options in the life sciences. The degree is preparatory for careers in such areas as agriculture, human and veterinary medicine, dentistry, pharmacy, ecology and conservation, molecular/cell biology and biotechnology.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....	36 credits
<b>English</b> .....	<b>6 credits</b>
<i>ENC 1101 and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110 or LIT 2120</i>	
<b>Humanities</b> .....	<b>6 credits</b>
<i>AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110</i>	
<b>(Recommended: PHI 1103, PHI 2630 or PHI 1635)</b>	
<b>Mathematics</b> .....	<b>6 credits</b>
<i>MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311,</i>	

MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204, STA 2023

**(Recommended: MAC 2311, STA 2023)**

**Science .....6 credits**

AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L

**(Recommended: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L)**

**Social Science ..... 12 credits**

**Student must take 6 credits from the following:**

AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040

**Student must take 6 credits from the following:**

ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013, ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010

**(Recommended: PSY 2012, ANT 1000, ANT 2140 or ANT 2410)**

Electives ..... 24 credits

**Common Prerequisite Required Courses\*** (may be taken within A.A. Degree):

MAC 2311, STA 2023, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L.

\*Requires a grade of “C” or higher

**CORE BIOLOGY CONCENTRATION (Required: 32 credits)**

BCH	4053	Biochemistry I .....	3 credits
BSC	3931	Junior Seminar I .....	1 credit
BSC	3932	Junior Seminar II .....	1 credit
BSC	4910	Senior Project I .....	1 credit
BSC	4911	Senior Project II .....	1 credit
MCB	3023	General Microbiology .....	3 credits
MCB	3023L	General Microbiology Laboratory .....	1 credit
PCB	3063	Genetics .....	3 credits
PCB	3063L	Genetics Laboratory .....	1 credit
PCB	4024	Molecular and Cell Biology .....	3 credits
PCB	4043	General Ecology .....	3 credits
PCB	3674	Evolutionary Biology .....	3 credits
and			
PHY	2053	College Physics I .....	3 credits
PHY	2053L	College Physics I Laboratory.....	1 credit

PHY	2054	College Physics II.....	3 credits
PHY	2054L	College Physics II Laboratory.....	1 credit
or			
PHY	2048	Physics for Engineers I.....	3 credits
PHY	2048L	Physics for Engineers I Laboratory.....	1 credit
PHY	2049	Physics for Engineers II.....	3 credits
PHY	2049L	Physics for Engineers II Laboratory.....	1 credit

**MAJOR CONCENTRATION (Molecular/Biotechnology: 28 credits)**

BCH	4054	Biochemistry II .....	3 credits
BCH	4053L	Biochemistry I Laboratory.....	1 credit
BOT	3015	Plant Botany .....	3 credits
BSC	3464	Biotechnology I .....	3 credits
BSC	3464L	Biotechnology I Laboratory .....	1 credit
BSC	3465	Biotechnology II .....	3 credits
BSC	3465L	Biotechnology II Laboratory .....	1 credit
BSC	4422	Applications in Biotechnology.....	3 credits
BSC	4434	Introduction to Bioinformatics.....	3 credits
PCB	4023	Cell Biology and Physiology.....	3 credits
PCB	4024L	Molecular and Cell Biology Laboratory .....	1 credit
PCB	4233	Immunology .....	3 credits

**BACHELOR’S DEGREE PROGRAMS IN DIGITAL MEDIA**

**BACHELOR OF APPLIED SCIENCE IN DIGITAL MEDIA – 120 CREDITS**

**Graphics and Web Concentration (R0040 - 39 credits)**

**Gaming and Video Concentration (R0050 - 39 credits)**

**Modeling and Simulation Concentration (R0060 – 39 credits)**

The Bachelor of Applied Science (B.A.S.) in Digital Media is designed to provide advanced skills in the theoretical and practical aspects of three areas critical to this industry: Graphics and Web, Gaming and Video, and Modeling and Simulation. The upper-level coursework will broaden students' knowledge in technical applications, art and design, interactive media, animation, management and entrepreneurial practices, scriptwriting, ethics, critical and creative thinking in media, and the interdisciplinary nature of art, technology, and science.

<b>TRANSFER FROM ASSOCIATE DEGREE (DMT or GDT).....</b>	<b>45c redits</b>
General Education Requirement.....	36 credits
Major Concentration Courses .....	39 credits

**GENERAL EDUCATION COURSES**

**English .....** **6 credits**  
*ENC 1101 and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110 or LIT 2120*  
*(Recommended: ENC 1101, ENC 1102)*

**Humanities .....** **6 credits**  
*AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533,*

HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100; ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110

(Recommended: ARH 2051, PHI 1103)

**Mathematics .....6 credits**

MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311, MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204, STA 2023

(Recommended: MAC 1105, MAC 2233)

**Science .....6 credits**

AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L

(Recommended: ESC 1000, PHY 1020)

**Social Science ..... 12 credits**

**Student must take 6 credits from the following:**

AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040

(Recommended: AMH 2020, WOH 2040)

**Student must take 6 credits from the following:**

ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013, ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010

(Recommended: ECO 2013, PSY 2012)

Electives ..... 24 credits

**GRAPHICS AND WEB CONCENTRATION (ROO40 - 39 credits)**

**Core Courses (27 credits)**

GRA	3102	Principles of Visual Communication .....	3 credits
GRA	3512	Branding and Corporate Identity .....	3 credits
GRA	3735	Multimedia Production I.....	3 credits
GRA	3758	Advanced HTML and CSS for Web Design.....	3 credits
GRA	4137	Advanced Web Design .....	3 credits
GRA	4154	Advanced Illustration Methods.....	3 credits
GRA	4591	Art Direction and Creative Process .....	3 credits
GRA	4950	Digital Media Portfolio.....	3 credits
GRA	4954	Digital Media Capstone Project.....	3 credits

**Concentration Electives (Select 12 credits)**

CGS	4845	Advanced E-commerce .....	3 credits
DIG	3253	Advanced Digital Media Audio.....	3 credits
DIG	3823	Creative Digital Media Problem Solving.....	3 credits
DIG	4884	Motion Graphics: Advanced Compositing.....	3 credits
GRA	3209	Advanced Typography .....	3 credits
GRA	4116	Advanced Advertising Design and Graphics.....	3 credits
GRA	4119	Type and Package Design.....	3 credits
GRA	4513	Communication Design & Visual Persuasion .....	3 credits
GRA	4738	Multimedia Production II.....	3 credits
GRA	4941	Digital Media Internship - Practicum.....	3 credits

**TECHNICAL CORE COURSES (21 credits)**

Students who enter the program with an A.S. in Digital Media Technology or Graphic Design Technology will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. or A.A.S. Degree in another discipline must complete the following technical core courses:

CGS	1821	Website Development .....	3 credits
DIG	1000	Digital Media Principles .....	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2302	3D Digital Animation I .....	3 credits
GRA	1129	Visualization Basics .....	3 credits
GRA	2160	Digital Animation 1.....	3 credits

**GAMING AND VIDEO CONCENTRATION (RO050 - 39 credits)****Core Courses (30 credits)**

DIG	3355	Artificial Effects and Environments .....	3 credits
DIG	3362	Artificial 3D Characters .....	3 credits
DIG	3628	Game Networking.....	3 credits
DIG	3713	Gaming Principles .....	3 credits
DIG	4354	3D Modeling in Animation .....	3 credits
DIG	4375	Adv. Modeling - Rigid Bodies & Vehicle Structures .....	3 credits
DIG	4725	Advanced Game Design.....	3 credits
DIG	4715	Advanced Game Production .....	3 credits
DIG	4720	Casual Game Production .....	3 credits
GRA	4954	Digital Media Capstone Project.....	3 credits

**Concentration Electives (Select 9 credits)**

DIG	3253	Advanced Digital Media Audio.....	3 credits
DIG	3823	Creative Digital Media Problem Solving.....	3 credits
DIG	4433	Advanced Interactive Design .....	3 credits
DIG	4770	Building Virtual Worlds.....	3 credits
DIG	4884	Motion Graphics: Advanced Compositing.....	3 credits
GRA	3209	Advanced Typography .....	3 credits
GRA	4941	Digital Media Internship - Practicum.....	3 credits
GRA	4950	Digital Media Portfolio.....	3 credits

**TECHNICAL CORE COURSES (21 credits)**

Students who enter the program with an A.S. in Digital Media Technology or Graphic Design Technology will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. or A.A.S. Degree in another discipline must complete the following technical core courses:

COP	1800	Java Programming.....	3 credits
DIG	1000	Digital Media Principles.....	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2302	3D Digital Animation I.....	3 credits
GRA	1129	Visualization Basics.....	3 credits
GRA	2160	Digital Animation 1.....	3 credits

**MODELING AND SIMULATION CONCENTRATION (RO060 - 39 credits)****Core Courses (30 credits)**

CAP	3806	Object Oriented Simulation.....	3 credits
DIG	3355	Artificial Effects and Environments.....	3 credits
DIG	3362	Artificial 3D Characters.....	3 credits
DIG	3703	Modeling and Simulation Principles.....	3 credits
DIG	3870	Discrete Systems Simulation.....	3 credits
DIG	4354	3D Modeling in Animation.....	3 credits
DIG	4375	Adv. Modeling - Rigid Bodies & Vehicle Structures.....	3 credits
DIG	4433	Advanced Interactive Design.....	3 credits
DIG	4780	Modeling Real Time Systems.....	3 credits
GRA	4954	Digital Media Capstone Project.....	3 credits

**Concentration Electives (Select 9 credits)**

DIG	3253	Advanced Digital Media Audio.....	3 credits
DIG	3823	Creative Digital Media Problem Solving.....	3 credits
DIG	4872	Applied Digital Simulation.....	3 credits
DIG	4874	Training System Design.....	3 credits
DIG	4884	Motion Graphics: Advanced Compositing.....	3 credits
GRA	3209	Advanced Typography.....	3 credits
GRA	4941	Digital Media Internship - Practicum.....	3 credits
GRA	4950	Digital Media Portfolio.....	3 credits

**TECHNICAL CORE COURSES (21 credits)**

Students who enter the program with an A.S. in Digital Media Technology or Graphic Design Technology will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. or A.A.S. Degree in another discipline must complete the following technical core courses:

DIG	1000	Digital Media Principles.....	3 credits
DIG	1115	Digital Imaging Fundamentals.....	3 credits
DIG	2030	Digital Video Fundamentals.....	3 credits
DIG	2302	3D Digital Animation I.....	3 credits
ETD	2364	3D Modeling with Solidworks.....	3 credits
GRA	1129	Visualization Basics.....	3 credits
GRA	2160	Digital Animation 1.....	3 credits

**BACHELOR'S DEGREE PROGRAMS IN EDUCATION**  
**BACHELOR OF SCIENCE IN**  
**EXCEPTIONAL STUDENT EDUCATION WITH ESOL**  
**S0010 - 125 CREDITS**

Helping children and young people overcome challenges to learning is extremely rewarding. As a specialist in Exceptional Student Education you will create opportunities that help every child succeed in the classroom. Through this IRSC program, you will gain a firm foundation in educational methods and classroom experience to help each child reach his or her full potential.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....	36 credits
<b>English</b> .....	<b>6 credits</b>
<i>ENC 1101 and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110 or LIT 2120</i>	
<b>Humanities</b> .....	<b>6 credits</b>
<i>AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110</i>	
<b>Mathematics</b> .....	<b>6 credits</b>
<i>MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311, MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204, STA 2023</i>	
<b>Science</b> .....	<b>6 credits</b>
<i>AST1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L</i>	
<b>Social Science</b> .....	<b>12 credits</b>
<b>Student must take 6 credits from the following:</b>	
<i>AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040</i>	
<b>Student must take 6 credits from the following:</b>	
<i>ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013, ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010</i>	
Electives .....	24 credits

Completion of all lower-division state-mandated common prerequisites including the three (3) Education prerequisites: EDF 2005, EDF 2085, EME 2040 as well as EEX 2010.

**Major Concentration (65 credits)**

EDF	3214	Human Development & Learning.....	3 credits
EDF	4430	Measurement, Evaluation & Assessment .....	3 credits
EDG	4376	Integrating Language Arts & Social Sciences .....	3 credits
EDG	4377C	Integrating Mathematics & Science.....	3 credits
EDG	4410	Classroom Management & Communication .....	3 credits
EEX	3103	Survey of Normal/Abnormal Language & Speech .....	1 credit
EEX	4221	Educational Assessment of Exceptional Students.....	3 credits
EEX	4264	Curriculum & Instruction for Students with Disabilities for Grades K-5.....	3 credits
EEX	4265	Curriculum & Instruction for Students with Disabilities for Grades 6-12.....	3 credits
EEX	4601	Effective Behavioral Interventions & Practices in ESE .....	3 credits
EME	3410	Integrating Technology in the Classroom.....	3 credits
RED	3009	Early & Emergent Literacy .....	3 credits
RED	4348	Literacy Development for Grades K-12.....	3 credits
RED	4519C	Diagnostic & Instructional Interventions in Reading .....	3 credits
TSL	3520C	Cultural Dimensions of ESOL .....	3 credits
TSL	3251	Applied Linguistics .....	3 credits
TSL	4140C	TESOL Curriculum & Materials .....	3 credits
TSL	4340C	TESOL Methods .....	3 credits
TSL	4441C	ESOL Testing & Evaluation.....	1 credit
EEX	4940	Student Teaching/ESE Internship & Seminar .....	12 credits

**BACHELOR OF SCIENCE IN MIDDLE GRADES MATH  
S0020 – 120 CREDITS**

As a math teacher you will help children and young people build vitally important skills in mathematics – skills that will help them in all aspects of their lives. Mathematics is especially important as the foundation for a world-class education. Help students attain the competencies and knowledge they will need for success in the 21<sup>st</sup> century.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....	36 credits
<b>English.....</b>	<b>6c credits</b>
<i>ENC 1101, and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, or LIT 2120</i>	
<b>Humanities .....</b>	<b>6c credits</b>
<i>AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110</i>	

**Mathematics** .....6 credits  
 MAC 1105, MAC 1114, MAC1140, MAC 2233, MAC 2234, MAC 2311,  
 MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106,  
 MGF 2107, MTG 2204

**Science** .....6 credits  
 AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L,  
 BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L,  
 BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L,  
 BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM  
 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS  
 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000,  
 OCB 1000L, OCB 1630, OCE 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB  
 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053,  
 PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L

**Social Science** ..... 12 credits

**Student must take 6 credits from the following:**

AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012,  
 WOH 2022, WOH 2040

**Student must take 6 credits from the following:**

ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013,  
 ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000,  
 SYG 2010

Electives..... 24c redits

Completion of all lower-division state-mandated common prerequisites including the  
 three (3) Education prerequisites: EDF 2005, EDF 2085 and EME 2040.

### Major Concentration (60 credits)

EDF	3214	Human Development & Learning	3 credits
EDF	4430	Measurement, Evaluation & Assessment	3 credits
EDG	3343	Instructional Strategies	3 credits
EDG	4410	Classroom Management & Communication	3 credits
EDM	3001	Introduction to Middle School	3 credits
EME	3410	Integrating Technology in the Classroom	3 credits
MAE	3816	Elements of Geometry	3 credits
MAE	3940	Teaching Middle School Mathematics Practicum	1 credit
MAE	4363	Middle School/Secondary School Mathematics Methods	3 credits
MAE	4815	Elements of Algebra	3 credits
MAE	4941	Teaching Secondary Mathematics Practicum	1 credit
MAE	4932	Seminar in Math Education	3 credits
MAT	3905	Math through Tutoring	3 credits
MHF	4404	History of Mathematics	3 credits
RED	3360	Teaching Reading in Middle/Secondary Schools	3 credits
STA	2023	Elementary Statistics I	3 credits
		Math Elective	3 credits
TSL	3080	ESOL Issues: Principles & Practices	3 credits

MAE 4945 Student Teaching in Mathematics.....10 credits

**BACHELOR OF SCIENCE IN SECONDARY MATH  
S0030 – 120 CREDITS**

As a high school math teacher you will help young people build vitally important skills in mathematics – skills that will help them in all aspects of their lives. Mathematics is especially important as the foundation for a world-class education. Help students attain the competencies and knowledge they will need for success in the 21<sup>st</sup> century.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....36 credits

**English .....6 credits**

*ENC 1101, and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, or LIT 2120*

**Humanities ..... 6 credits**

*AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110*

**Mathematics .....6 credits**

*MAC 1105, MAC 1114, MAC1140, MAC 2233, MAC 2234, MAC 2311, MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204*

**Science .....6 credits**

*AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L*

**Social Science ..... 12 credits**

**Student must take 6 credits from the following:**

*AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040*

**Student must take 6 credits from the following:**

*ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013, ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010*

Electives..... 24c redits

Completion of all lower-division state-mandated common prerequisites including the three (3) Education prerequisites: EDF 2005, EDF 2085 and EME 2040.

**Major Concentration (60 credits)**

EDF	3214	Human Development & Learning.....	3 credits
EDF	4430	Measurement, Evaluation & Assessment .....	3 credits
EDG	3343	Instructional Strategies.....	3 credits
EDG	4410	Classroom Management & Communication .....	3 credits
EME	3410	Integrating Technology in the Classroom.....	3 credits
RED	3360	Teaching Reading in Middle/Secondary Schools.....	3 credits
MAE	3651	Learn Math with Technology.....	1 credit
MAE	3940	Teaching Middle School Mathematics Practicum.....	1 credit
MAE	4363	Middle School/Secondary School Mathematics Methods.....	3 credits
MAE	4932	Seminar in Math Education.....	3 credits
MAE	4941	Teaching Secondary Mathematics Practicum .....	1 credit
MAP	3303	Differential Equations II.....	3 credits
MAS	3105	Applied Linear Algebra .....	4 credits
MAS	4203	Number Theory.....	3 credits
MAT	3905	Math through Tutoring.....	1 credit
MHF	4404	History of Mathematics.....	3 credits
MTG	3212	Modern Geometries .....	3 credits
STA	2023	Elementary Statistics I.....	3 credits
TSL	3080	ESOL Issues: Principles & Practices .....	3 credits
MAE	4945	Student Teaching in Math.....	10 credits

**BACHELOR OF SCIENCE IN MIDDLE GRADES SCIENCE  
S0040 – 120 CREDITS**

As a science teacher you will help children and young people explore the fascinating world of science, inspiring interest in a field that will dramatically affect our lives in the 21<sup>st</sup> century. Watch your students’ faces light up as they understand a new concept or become engaged in an experiment. Teaching is truly a meaningful career, and science teaching is especially important as the foundation for a world-class education.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....36 credits

**English** .....6 credits

*ENC 1101, and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, or LIT 2120*

**Humanities** ..... 6 credits

*AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110*

**Mathematics** ..... 6 credits  
 MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311,  
 MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106,  
 MGF 2107, MTG 2204, STA 2023

**Science** ..... 6 credits  
 AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L,  
 BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L  
 BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L,  
 BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046,  
 CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L,  
 CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB  
 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001L, OCE 2013, PCB 1030,  
 PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY  
 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L

**Social Science**..... 12 credits

**Student must take 6 credits from the following:**

AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012,  
 WOH 2022, WOH 2040

**Student must take 6 credits from the following:**

ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013,  
 ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000,  
 SYG 2010

Electives..... 24c credits

Completion of all lower-division state-mandated common prerequisites including the three (3) Education prerequisites: EDF 2005, EDF 2085 and EME 2040.

### Major Concentration (60 credits)

BSC	2010	General Biology I with BSC 2010L or	
CHM	1045	General Chemistry I with CHM 1045L or	
PHY	2053	College Physics I with PHY 2053L.....	4 credits
BSC	2011	General Biology II with BSC 2011L or	
CHM	1046	General Chemistry II with CHM 1046L or	
PHY	2054	College Physics II with PHY 2054L.....	4 credits
EDF	3214	Human Development & Learning.....	3 credits
EDF	4430	Measurement, Evaluation & Assessment .....	3 credits
EDG	3343	Instructional Strategies.....	3 credits
EDG	4410	Classroom Management & Communication .....	3 credits
EDM	3001	Introduction to Middle School .....	3 credits
EME	3410	Integrating Technology in the Classroom.....	3 credits
OCE	3017	Current Issues in Marine Environmental Science .....	3 credits
OCE	2013	Marine Environmental Science .....	3 credits
PCB	4043	General Ecology.....	3 credits
PCB	4043L	General Ecology Lab .....	1 credit
RED	3360	Teaching Reading in Middle/Secondary Schools.....	3 credits
SCE	3360	Middle School/Secondary Science Methods .....	3 credits
SCE	3940	Teaching Middle School Science Practicum.....	1 credit

SCE	4942	Teaching Secondary Science Practicum.....	1 credit
SCE	4943	Seminar in Science Teaching .....	3 credits
TSL	3080	ESOL Issues: Principles & Practices .....	3 credits
SCE	4941	Student Teaching in Science .....	10 credits

**BACHELOR OF SCIENCE IN SECONDARY BIOLOGY**  
**S0050 – 120 CREDITS**

As a high school biology teacher you will help young people learn about the fascinating world of biology, inspiring interest in a field that will dramatically affect our lives in the 21<sup>st</sup> century. Engage your students as they become immersed in an experiment or amazed at a new concept. Teaching is truly a meaningful career, and science teaching is especially important as the foundation of a world-class education.

**TRANSFER FROM ASSOCIATE DEGREE:**

General Education Requirement.....36 credits

**English** .....6 credits

*ENC 1101, and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, or LIT 2120*

**Humanities** .....6 credits

*AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110*

**Mathematics** .....6 credits

*MAC 1105, MAC 1114, MAC1140, MAC 2233, MAC 2234, MAC 2311, MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204, STA 2023*

**Science** .....6 credits

*AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, GLY 1010, ESC 1000, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L*

**Social Science** ..... 12 credits

**Student must take 6 credits from the following:**

*AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040*

**Student must take 6 credits from the following:**

*ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013,*

*ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010*

Electives.....24c credits

Completion of all lower-division state-mandated common prerequisites including the three (3) Education prerequisites: EDF 2005, EDF 2085 and EME 2040.

**Major Concentration (60 credits)**

BOT	3015	Plant Biology .....	3 credits
EDF	3214	Human Development & Learning.....	3 credits
EDF	4430	Measurement, Evaluation & Assessment .....	3 credits
EDG	3343	Instructional Strategies.....	3 credits
EDG	4410	Classroom Management & Communication .....	3 credits
EME	3410	Integrating Technology in the Classroom.....	3 credits
MCB	2010	Microbiology for Health Sciences.....	3 credits
MCB	2010L	Microbiology Lab for Health Sciences.....	1 credit
PCB	3063	Introduction to Genetics .....	3 credits
PCB	4043	General Ecology.....	3 credits
PCB	4043L	General Ecology Lab .....	1 credit
RED	3360	Teaching Reading in Middle/Secondary Schools.....	3 credits
SCE	3360	Middle School/Secondary Science Methods .....	3 credits
SCE	3905	Science through Tutoring.....	3 credits
SCE	3940	Teaching Middle School Science Practicum.....	1 credit
SCE	4942	Teaching Secondary Science Practicum.....	1 credit
SCE	4943	Seminar in Science Education .....	3 credits
TSL	3080	ESOL Issues: Principles & Practices .....	3 credits
ZOO	3303C	General Vertebrate Zoology .....	4 credits
SCE	4941	Student Teaching in Science .....	10 credits

**BACHELOR’S DEGREE PROGRAMS IN HUMAN SERVICES**

**BACHELOR OF SCIENCE IN HUMAN SERVICES – 120 CREDITS**

**Human Services Generalist Concentration (S0080 - 21 credits)**

**Youth & Family Studies Concentration (S0090 - 21 credits)**

**Addictions Studies Concentration (S0100 – 21 Credits)**

The Bachelor of Science (B.S.) in Human Services prepares students to work with individuals, families, dyads, and groups in a wide array of human and social services settings. The curriculum provides theoretical as well as applied training in domestic abuse, child abuse, addictions, crisis intervention, family services, high risk youth, outreach, advocacy, and human services administration.

The Human Services Suite is designed to complement and facilitate practical application of skills. The facilities include a variety of individual and group therapy rooms as well as a child play therapy room and observation windows for critiquing. An Advanced Human Services Internship provides actual on-the-job work experience, further preparing students for the work place.

<b>TRANSFER FROM ASSOCIATE DEGREE .....</b>	<b>39 credits</b>
General Education Requirement.....	36 credits

Human Services Core Courses .....	24 credits
Major Concentration Courses .....	21 credits

**GENERAL EDUCATION COURSES**

**English** .....6 credits  
 ENC 1101 and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020,  
 ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, LIT 2120  
 (Recommended ENC 1101, ENC 1102)

**Humanities** .....6 credits  
 AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133,  
 ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533,  
 HUM 1541, HUM 2395, HUM 2512, IDS 1110, IDS 1955, JOU 2702, LIT 2110,  
 LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403,  
 PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801,  
 PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110  
 (Recommended PHI 1103, HUM 1533)

**Mathematics** .....6 credits  
 MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311, MAC  
 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107,  
 MTG 2204, STA 2023  
 (Recommended STA 2023)

**Science** .....6 credits  
 AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L,  
 BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L,  
 BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L,  
 BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046,  
 CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L,  
 CHS 1510, ESC 1000, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB  
 1000L, OCB 1630, OCB 1630L, OCB 1951C, OCE 2001, OCE 2001L, OCE  
 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L,  
 PHY 2053, PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L  
 (Recommended BSC 1005)

**Social Science** ..... 12 credits

**Student must take 6 credits from the following:**

AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012,  
 WOH 2022, WOH 2040

**Student must take 6 credits from the following:**

ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013,  
 ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000,  
 SYG 2010

(Recommended PSY 2012, SYG 2000)

**CORE COURSES (24 credits)**

HUS	3300	Humanistic and Existential Counseling Theory.....	3 credits
HUS	3314	Cognitive and Behavioral Theory.....	3 credits
HUS	3340	Trauma and Post Traumatic Stress Disorder.....	3 credits
HUS	3360	Sexual Abuse of Children and Adolescents.....	3 credits

HUS	3650	Administration in Human Services.....	3 credits
MHS	3460	Crisis Intervention .....	3 credits
HUS	4945	Capstone - Advanced Internship in Human Services.....	6 credits

**MAJOR CONCENTRATION (select concentration path):****Human Services Generalist Concentration (S0080 - 21 credits)**

HUS	3350	Issues in Domestic Abuse and Family Violence .....	3 credits
HUS	3351	Family Systems and Dynamics .....	3 credits
HUS	3409	Addictive Experiences .....	3 credits
HUS	3575	Human Services for Special Needs Families.....	3 credits
HUS	4319	Introduction to Play Therapy.....	3 credits
HUS	4352	Family Diversity in Human Services.....	3 credits
HUS	4361	High Risk and Offender Youth .....	3 credits
HUS	4364	Youth, Drugs, and Gangs .....	3 credits
HUS	4407	Substance Abuse and Aging.....	3 credits
HUS	4410	Internet Addictions .....	3 credits
HUS	4416	Issues in Impulse Control .....	3 credits
HUS	4442	Addictions Family Counseling.....	3 credits
HUS	4462	Gender Issues in Treatment and Recovery.....	3 credits
HUS	4574	Issues of Aging and Family Dynamics.....	3 credits

**Youth and Family Studies Concentration (S0090 - 21 credits)**

HUS	3350	Issues in Domestic Abuse and Family Violence .....	3 credits
HUS	3351	Family Systems and Dynamics .....	3 credits
HUS	3575	Human Services for Special Needs Families.....	3 credits
HUS	4319	Introduction to Play Therapy.....	3 credits
HUS	4352	Family Diversity in Human Services.....	3 credits
HUS	4361	High Risk and Offender Youth .....	3 credits
HUS	4364	Youth, Drugs, and Gangs .....	3 credits
HUS	4442	Addictions Family Counseling.....	3 credits
HUS	4574	Issues of Aging and Family Dynamics.....	3 credits

**Addictions Studies Concentration (S0100 - 21 credits)**

HUS	3409	Addictive Experiences .....	3 credits
HUS	4361	High Risk and Offender Youth .....	3 credits
HUS	4364	Youth, Drugs, and Gangs .....	3 credits
HUS	4407	Substance Abuse and Aging.....	3 credits
HUS	4410	Internet Addictions .....	3 credits
HUS	4416	Issues in Impulse Control .....	3 credits
HUS	4442	Addictions Family Counseling.....	3 credits
HUS	4462	Gender Issues in Treatment and Recovery.....	3 credits

**TECHNICAL CORE COURSES (18 credits)**

Students who enter the program with an A.S. in Human Services will have already satisfied the technical core courses. Students entering with an A.A. Degree or an A.S. or A.A.S. Degree in another discipline must complete the following technical courses:

CLP	2140	Abnormal Psychology .....	3 credits
HUS	1001	Introduction to Human Services.....	3 credits

HUS	1200	Group Dynamics .....	3 credits
HUS	2302	Techniques of Interviewing and Intervention .....	3 credits
HUS	2301	Counseling Techniques .....	3 credits
HUS	2500	Introduction to Ethics in Human Services .....	3 credits

**BACHELOR'S DEGREE PROGRAM IN NURSING**  
**BACHELOR OF SCIENCE IN NURSING**  
**S0060 – 121 CREDITS**

Today's challenging and demanding health care environment requires highly adaptable employees with a broad base of knowledge and leadership skills. Professional nurses must be effective in leading an increasingly diverse group of employees and managing complex resources within the health care industry.

The Bachelor of Science in Nursing Degree will provide access to upper-level courses to residents of the Research Coast who already have an Associate in Science Degree in Nursing. These Baccalaureate courses will allow nurses to further their career by providing them with an educational background and practical experience to become qualified nurse leaders.

*All core curriculum (NUR prefix), English, Mathematics, Humanities and Natural Science courses require a grade of "C" or higher.*

**TRANSFER FROM ASSOCIATE DEGREE**

General Education Requirement.....24 credits  
*ENC 1101, and ENC 1102 or ENC 1107, with BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020 MCB 2010, MCB 2010L; and PSY 2012 or SYG 2000*

Major Concentration Courses ..... 48 credits  
*NUR 1020C, NUR 2264C, NUR 2217C, NUR 2310C, NUR 2420C, NUR 2242, NUR 2520C, NUR 1142, NUR 2811L, DEP 2004, HUN1201*

General Education Courses (18 credits)

*\*Humanities (PHI 1010 and PHI 1635 recommended)..... 6 credits*

*\*Social Science (AMH 2010 and AMH 2020 recommended) ..... 6 credits*

*\*Mathematics MAC 1105 and STA 2023..... 6 credits*

**Major Concentration (31 credits)**

NUR 3065C Nursing Assessment with Clinical ..... 3 credits

NUR 3125 Pathophysiology..... 3 credits

NUR 3145 Pharmacology..... 3 credits

NUR 3164 Nursing Research & Informatics ..... 3 credits

NUR 3826 Ethical & Legal Issues in Health Care..... 3 credits

NUR 3846 Nursing Theory ..... 3 credits

NUR 4636C Community Health with Clinical..... 4 credits

NUR 4655 Nursing in a Diverse Culture..... 3 credits

NUR 4827 Leadership & Management in Professional Nursing ..... 3 credits

NUR 4837 Health Care Policy & Economics ..... 3 credits

\*These courses may be taken prior to entering the program.

## BACHELOR'S DEGREE PROGRAMS IN ORGANIZATIONAL MANAGEMENT

### BACHELOR OF APPLIED SCIENCE IN ORGANIZATIONAL MANAGEMENT – 120 CREDITS

**Organizational Management Major (R0010 - 24 credits)**

**Public Safety Administration Major (R0020 - 24 credits)**

**Health Care Management Major (R0030 - 24 credits)**

The Bachelor of Applied Science (B.A.S.) in Organizational Management provides access to students who already have skills in a technical area and wish to advance to higher level supervisory and management positions within business, industry, and governmental organizations. This upper-level coursework of the B.A.S. program will broaden students' knowledge in applied management practices and will prepare them for supervisory and management opportunities within their chosen field through one of the three specialized concentrations: Organizational Management, Public Safety Administration, or Health Care Management.

<b>TRANSFER FROM ASSOCIATE DEGREE</b> .....	42 credits
General Education Requirement.....	36 credits
Organizational Management Core Courses .....	18 credits
Major Concentration Courses .....	24 credits

#### **GENERAL EDUCATION COURSES**

**English** ..... 6 credits  
*ENC 1101, and ENC 1102, ENC 1107, ENC 2210, AML 2010, AML 2020, ENL 2012, ENL 2022, LIN 2670, LIT 2030, LIT 2110, or LIT 2120*

**Humanities** ..... 6 credits  
*AML 2010, AML 2020, ARH 1000, ARH 2050, ARH 2051, ENC 2133, ENG 1123, ENG 1124, ENL 2012, ENL 2022, HUM 1233, HUM 1533, HUM 1541, HUM 2512, IDS 1110, IDS 1955, ISC 2133, LIT 2110, LIT 2120, MUL 2010, MUL 2012, MUY 2100, ORI 1001, PHH 2060, PHH 2403, PHH 2603, PHI 1002, PHI 1010, PHI 1103, PHI 1112, PHI 1635, PHI 1801, PHI 2620, PHI 2623, PHI 2630, REL 1300, SPC 1608, THE 1000, THE 2300, TPP 1110*

**Mathematics** ..... 6 credits  
*MAC 1105, MAC 1114, MAC 1140, MAC 2233, MAC 2234, MAC 2311, MAC 2312, MAC 2313, MAD 2104, MAP 2302, MAS 2103, MGF 2106, MGF 2107, MTG 2204, STA 2023*

**Science** ..... 6 credits  
*AST 1002, AST 1002L, BOT 2010, BOT 2010L, BSC 1005, BSC 1005L, BSC 1009, BSC 1084, BSC 1254, BSC 1254L, BSC 1421, BSC 1421L, BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 2093, BSC 2093L, BSC 2094, BSC 2094L, CHM 1020, CHM 1045, CHM 1045L, CHM 1046, CHM 1046L, CHM 1083, CHM 2210, CHM 2210L, CHM 2211, CHM 2211L, CHS 1510, ESC 1000, GLY 1010, MCB 2010, MCB 2010L, MET 1001, OCB 1000, OCB 1000L, OCB 1630, OCB 1630L, OCE 2001, OCE 2001L, OCE 2013, PCB 1030, PHY 1020, PHY 2048, PHY 2048L, PHY 2049, PHY 2049L, PHY 2053,*

*PHY 2053L, PHY 2054, PHY 2054L, PSC 1341, PSC 1341L*

**Social Science** ..... **12 credits**

**Student must take 6 credits from the following:**

*AMH 2010, AMH 2020, EUH 2000, EUH 2001, EUH 2002, WOH 2012, WOH 2022, WOH 2040*

**Student must take 6 credits from the following:**

*ANT 1000, ANT 2140, ANT 2410, ASN 1010, CPO 2002, DEP 2004, ECO 2013, ECO 2023, GEA 2000, INR 2002, INR 2500, POS 1041, PSY 2012, SYG 2000, SYG 2010*

**CORE COURSES (18 credits)**

BUL	3130	Legal and Social Aspects of Business .....	3 credits
FIN	3400	Financial Management .....	3 credits
or			
ACG	3024	Accounting for Non-Financial Majors .....	3 credits
ISM	3011	Intro to Management Information Systems.....	3 credits
MAN	3240	Organizational Behavior.....	3 credits
MAN	3303	Management & Leadership.....	3 credits
MAN	4301	Human Resources Management .....	3 credits

**MAJOR CONCENTRATION (select concentration path):**

**Organizational Management (24 credits - R0010)**

**REQUIRED COURSES - 21 credits**

GEB	3213	Business Writing .....	3 credits
GEB	4891	Strategic Planning .....	3 credits
MAN	4162	Customer Relations for Managers .....	3 credits
MAN	4504	Operations Management.....	3 credits
MAR	3023	Marketing Management .....	3 credits
MAN	4900	Capstone Project in Organizational Management .....	6 credits

**ELECTIVES - Select 3 credits:**

GEB	4930	Selected Topics in Management .....	3 credits
MAN	4442	International Business.....	3 credits
MAR	4613	Marketing Research .....	3 credits

**Public Safety Administration (24 credits - R0020)**

DSC	3064	Security & Emergency Communications.....	3 credits
DSC	3079	Foundations of Public Safety.....	3 credits
DSC	3215	Emergency Planning .....	3 credits
DSC	4226	National Incident Management.....	3 credits
DSC	4755	National Security .....	3 credits
DSC	4931	Selected Topics in Public Safety.....	3 credits
DSC	4013	Capstone Project in Public Safety .....	6 credits

**Health Care Management (24 credits - R0030)**

HSA	3113	Health Care Trends & Issues .....	3 credits
HSA	4160	Health Care Marketing.....	3 credits
HSA	4383	Quality Improvement in Health Care .....	3 credits
HSA	4421	Policy & Governmental Regulations in Health Care.....	3 credits

HSC	3500	Epidemiology .....	3 credits
HSC	4730	Foundations of Health Science Research .....	3 credits
HSA	4922	Capstone Project Health Care Management.....	6 credits