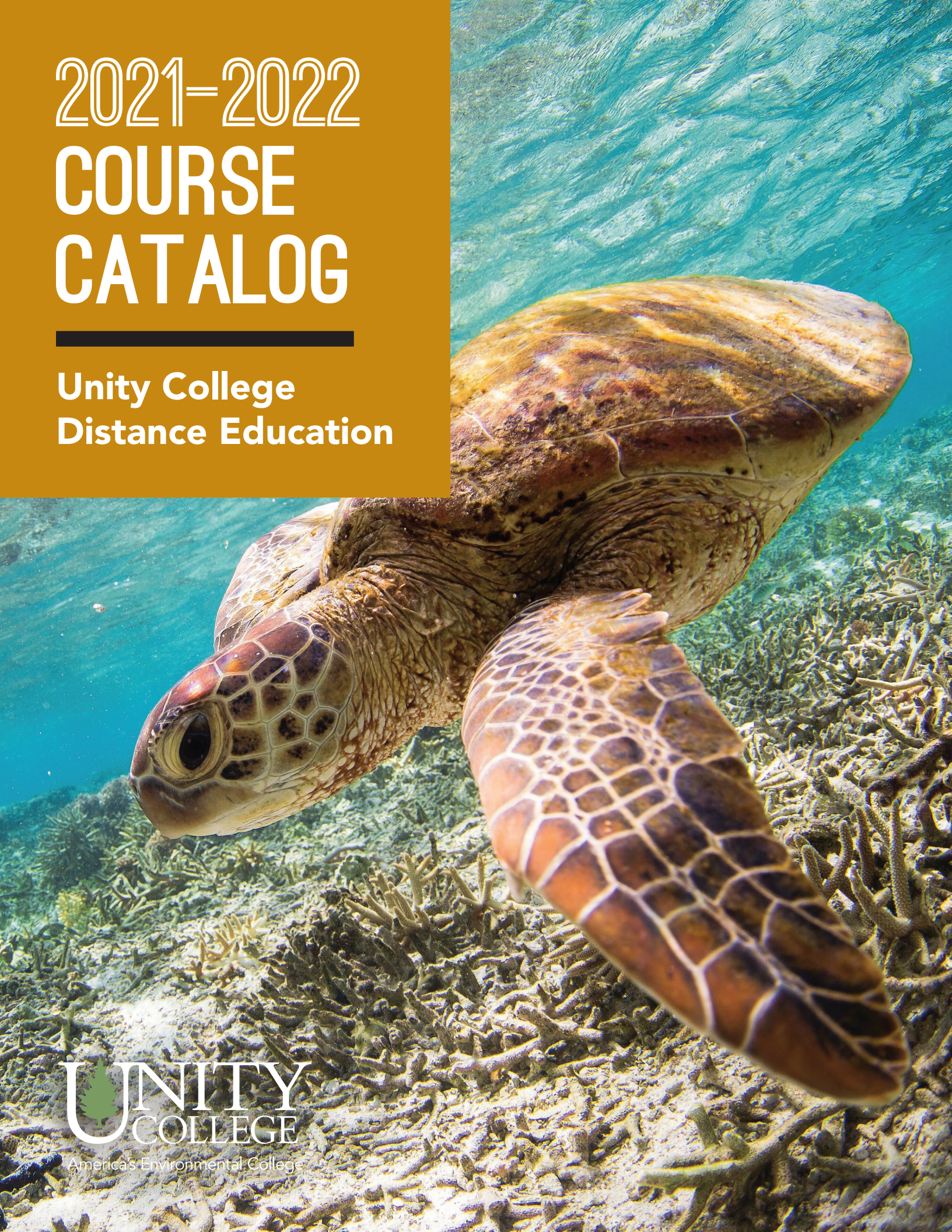
2021-2022 COURSE CATALOG

Unity College Distance Education



UNITY COLLEGE

America's Environmental College

Academic Year 2021-2022

Contents

Academic Year 2021-2022 1
A Note from President Khoury 6
SECTION 1: INTRODUCTION 7
The Unity College Mission 7
The Unity College Distance Education Catalog 7
Statement of Accreditation 8
SECTION 2: ADMISSIONS GUIDELINES 9
Undergraduate Admissions Requirements 9
Admissions Requirement for Homeschooled Students 9
Graduate Admissions Requirements 9
Admissions Requirement for Graduate Students with a Non-Science Background 10
Readmission to the College 10
Transfer of Credits 11
SECTION 3: EXPENSES AND FINANCIAL AID 14
Cost of Attendance 14
Billing 14
Failure to Pay 14
Refund Policy 14
Failure to Participate 14
Financial Aid 14
Return to Title IV 15
Private Loans 16
SECTION 4: ACADEMIC POLICIES 17
Definition of a Distance Education Credit 17
Definition of a non-credit course: 17
Course Load and Status 18
Course Registration 18

Course Cancellation 18
Add/Drop Courses 18
Attendance/Class Participation 18
Extended Absence 19
Course Withdrawal 19
Leaves of Absence and Time Limitation for Degree Completion 20
Withdrawal from the College 20
Medical Withdrawal from the College 20
Date of Withdrawal 21
Grading Policy 21
Undergraduate Grading Scale 21
W – Withdrawal (No credit) 22
WF – Withdrawal Failure (No credit) 22
I – Incomplete (No credit) 22
Calculating Grade Point Average (GPA) 23
Change of Final Grade 24
Repeating Courses 24
Class Standing 25
Academic Standing 25
Satisfactory Academic Progress 25
Failure to Meet the Minimum Standards 26
Suspension and Dismissal 26
Appeal of Financial Aid Suspension and Academic Dismissal 26
Probation 27
Academic Plan 27
Graduation 27
Application for a Degree 27
Participation in a Commencement Ceremony 28
Academic Honors 28
Replacement Copies of Diplomas 29
Unclaimed Diplomas 29
Second Bachelor's Degree 29
Second Master's Degree 29

SECTION 5: UNDERGRADUATE ACADEMIC PROGRAMS 30
Animal Health and Behavior 30
Animal Science 31
Environmental Geospatial Technologies 34
Environmental Health and Safety 35
Environmental Health and Wellness Management 37
Environmental Justice and Social Change 39
Environmental Science and Climate Change 41
Environmental Studies 42
Marine Biology and Sustainable Aquaculture 43
Wildlife Conservation 45
Undergraduate Concentrations 47
UNDERGRADUATE CERTIFICATES 50
Environmental Geographic Information Systems (GIS) 50
Pre-Veterinary and Graduate School Prerequisites 51
SECTION 6: GRADUATE ACADEMIC PROGRAMS 53
Master of Professional Science Program Goals 53
Master of Professional Science: Animal Science and Behavior 54
Master of Professional Science: Environmental Geographic Information Science (GIS) 55
Master of Professional Science: Environmental Science 56
Master of Professional Science: Environmental Studies and Sustainability 57
Master of Professional Science: Marine Science 58
Master of Professional Science: Urban Ecology and Sustainable Planning 59
Master of Professional Science: Wildlife Conservation and Management 60
GRADUATE CERTIFICATES 61
Certificate in Environmental GIScience 62
Certificate in Sustainability 62
SECTION 7: COURSE DESCRIPTIONS 63
Undergraduate Course Descriptions 63
ADVENTURE ECOTOURISM COURSES 63
ANIMAL HEALTH AND BEHAVIOR COURSES 63
ARTS COURSES 67

BIOLOGY COURSES 68
CHEMISTRY COURSES 70
COMMUNICATION COURSES 72
COMPUTER SCIENCE COURSES 74
ECONOMICS COURSES 75
ENVIRONMENTAL EMERGENCY MANAGEMENT AND LAW ENFORCEMENT COURSES 75
ENVIRONMENTAL CRIMINAL JUSTICE COURSES 76
ENVIRONMENTAL HEALTH AND SAFETY COURSES 78
ENVIRONMENTAL HEALTH AND WELLNESS COURSES 80
ENVIRONMENTAL JUSTICE AND SOCIAL CHANGE COURSES 81
ENVIRONMENTAL PROFESSIONAL CORE COURSES 83
ENVIRONMENTAL SCIENCE COURSES 85
ENVIRONMENTAL STUDIES COURSES 86
FINANCE COURSES 88
GEOSPATIAL TECHNOLOGY COURSES 88
HEMP INDUSTRY AND SCIENCE COURSES 90
HUMANITIES COURSES 91
LANGUAGE COURSES 93
MANAGEMENT COURSES 93
MARINE BIOLOGY AND SUSTAINABLE AQUACULTURE COURSES 94
MARKETING COURSES 98
MATH COURSES 99
PHYSICS COURSES 100
PSYCHOLOGY COURSES 101
RENEWABLE ENERGY COURSES 101
SOCIOLOGY COURSES 102
SUSTAINABLE FOOD AND FARMING COURSES 102
VIRTUAL REALITY COURSES 103
WILDLIFE CONSERVATION COURSES 104
Graduate Course Descriptions 106
ANIMAL SCIENCE AND BEHAVIOR COURSES 106
CONSERVATION LAW ENFORCEMENT COURSES 108
ENVIRONMENTAL SCIENCE COURSES 109

GEOGRAPHIC INFORMATION SCIENCE COURSES 109
MARINE SCIENCE COURSES 111
MATHEMATICS COURSES 113
PROFESSIONAL SCIENCE COURSES 114
SUSTAINABLE BUSINESS COURSES 115
SUSTAINABLE NATURAL RESOURCE MANAGEMENT COURSES 116
SUSTAINABILITY COURSES 118
URBAN ECOLOGY AND SUSTAINABLE PLANNING COURSES 119
SECTION 8: COLLEGE POLICIES 120
Honor Code 120
Academic Dishonesty 120
Plagiarism 120
Cheating 121
Misrepresentation 121
Falsification 121
The Family Educational Rights and Privacy Act of 1974 121
Inspection of Records 121
Amendment of Records 121
Disclosure of Records 122
Directory Information 122
School Officials with Legitimate Educational Interests 122
Student Identity Verification Policy 122
Active Duty and Veteran Students 123
VA Benefits 123
Military Tuition Assistance 124
SECTION 9: RESOURCES 126
Academic Calendar 126
College Resources 126

A Note from President Khoury

Unity College Distance Education Students,

Welcome to Unity College! We are so happy you have chosen us to be your partner in your educational journey.

Here at Unity College, we believe that every student should have an education that is anchored in sustainability science, fortified by the liberal arts, integrates modern technology, and fully prepares them for a career after college. By joining Unity College, you are joining a team of people who are determined to make powerful and positive changes on the environment now and in the decades to come. Congratulations!

I hope you find your time with us rewarding and thank you for choosing Unity College!

If you need help or have questions, please reach out to your Distance Education Concierge or Distance Education Advisor.

In Unity,

Dr. Melik Khoury

Unity College President

SECTION 1: INTRODUCTION

The Unity College Mission

Through the framework of sustainability science, Unity College provides a liberal arts education that emphasizes the environment and natural resources. Through experiential and collaborative learning, our graduates emerge as responsible citizens, environmental stewards, and visionary leaders.

The Unity College Distance Education Catalog

The Distance Education Catalog contains the policies, procedures, and guidelines applicable to the Distance Education Strategic Education Business Unit (SEBU) at Unity College as reviewed and approved by the Unity College Distance Education administrative team. The Unity College Distance Education SEBU currently oversees all online undergraduate and graduate programs. All students in those programs/courses will follow the policies and procedures outlined in this catalog.

Unity College views the *Unity College Distance Education Catalog* as the primary contract between the College and the student. Students must follow the graduation requirements from the catalog in effect at the time of their matriculation, or students may elect to fulfill the requirements of any subsequent catalog, provided they were enrolled at the time the catalog was published. In either case, the catalog is to be considered in its entirety; students may not fulfill part of their program requirements from one catalog and another part from another catalog. Unity College reserves the right to change any of the statements made in the catalog by reasonable notice in a supplement or replacement publication.

Distance Education Undergraduate Programs: Distance Education undergraduate online programs involve engagement in a small-class setting, with active-learning, and highly engaged instructor feedback and support. Undergraduate students can expect to see organized, engaging courses that teach knowledge and skills professionals need to succeed in the 21st century.

Distance Education Graduate Programs: The most visible activity of distance education graduate work is the intellectual interaction of faculty and students involved in learning and devoted to advancing professionalism in their fields. Supporting these endeavors are academic leaders who are committed to providing an atmosphere in which distance education can flourish.

By accepting admission to Unity College, students indicate that they are responsible for adhering to the policies and procedures that govern their education at Unity College. The requirements of the undergraduate and graduate programs at Unity College have been instituted so that students, faculty, and administrators are guided by a shared set of expectations for education. We sincerely hope that awareness of these requirements allows each student a fruitful educational

experience at Unity College.

Statement of Accreditation

Unity College is fully accredited by the New England Commission of Higher Education (NECHE) Commission on Institutions of Higher Education (CIHE). NECHE is located at 3 Burlington Woods Drive, Suite 100, Burlington, MA 01803-4514. NECHE may also be contacted by telephone at (781) 425-7785 or through their website at http://cihe.neasc.org.

SECTION 2: ADMISSIONS GUIDELINES

Undergraduate Admissions Requirements

To enroll in a Unity College Distance Education undergraduate program, students must fit the following criteria:

- Have graduated High School [or equivalent] with a 2.0 minimum high school GPA on a 4.0 scale
- If transferring college credits: have a 2.0 minimum college transfer credit GPA on a 4.0 scale.

To be considered for admission into the Distance Education undergraduate program, a student must submit the following:

- A Unity College Distance Education undergraduate application for admission
- Verification of successful high school completion.

While unofficial transcripts are accepted during the admissions process, college credits may only be transferred to Unity College through the submission of an official college transcript. Official transcripts are received from an authorized third party or directly from another institution.

If the student fails to provide official transcripts to Unity College, transfer credit will not be awarded, and the student may be enrolled in Unity College courses that would have otherwise been fulfilled through transfer at time of enrollment. The Department of Education may, without notice, require Unity College to obtain the student's official transcripts for financial aid eligibility.

Admissions Requirement for Homeschooled Students

A homeschooled applicant for admission is required to submit the following for review:
1) A letter of recommendation from a non-relative that assesses the student's academic ability;

2) Submission of an electronic portfolio that shows evidence that the applicant has met the typical high school academic distribution requirements; and

3) Any test scores available [but not required], e.g., SAT or ACT.

Graduate Admissions Requirements

To enroll in a Unity College Distance Education graduate program, students must meet the following criteria:

- Have a minimum of a 3.0 undergraduate GPA on a 4.0 scale (preferred)

The following documentation needs to be submitted with an application for a graduate program:

- Unofficial transcripts demonstrating the completion of a bachelor's degree
- Current resume or C.V.
- Personal essay (500 words minimum) addressing the following:

    - Why are you interested in pursuing a degree at Unity College and how does this program align with your career goals?
    - How do your previous experiences and background prepare you for this degree?
- GRE score reports (optional)
- *For applicants with GPAs between 2.75 and 3.0*: Statement of circumstances (maximum of 500 words) that affected the student's GPA and how these have been addressed to ensure success at Unity College.

While unofficial transcripts are accepted during the admissions process, official transcripts from the institution where the bachelor's degree was awarded must be submitted prior to completing the student's first term at Unity College. Failure to submit official transcripts will prohibit the student from registering for the next term.

Admissions Requirement for Graduate Students with a Non-Science Background

Students with a non-science bachelor's degree must have the following classes before admittance into the Master of Professional Science in Wildlife Conservation and Management, Professional Wildlife Biologist Track: one statistics class **and** one ecology **or** wildlife biology **or** natural resource management class. There are no pre-requisites for the Master of Professional Science in Wildlife Conservation and Management, Conservation and Management Track.

Students with a non-science bachelor's degree must have the following classes before admittance into the Master of Professional Science in Environmental Science program: one statistics class **and** one geology **or** soil science **or** earth science class.

Students with a non-science bachelor's degree must have the following classes before admittance into the Master of Professional Science in Marine Science program: one statistics class **and** one marine biology **or** biology **or** oceanography class.

Readmission to the College

Students enrolled in a degree program may continue to work toward their degree program under the requirements that were in effect at the time they matriculated, providing there have been no breaks of more than twelve (12) months. Students who have a break of more than twelve months must apply to be reinstated to the Distance Education program and meet requirements of the catalog in effect at the time they are reinstated. After 12 months of inactivity, students must contact their academic advisor to express their intent to re-enroll in classes. Students who had a break in attendance for up to two (2) years due to military service are readmitted to their original program and catalog requirements, as long as the program is still active in Distance Education. The College reserves the right to make substitutions for courses that are no longer offered.

Transfer of Credits

Undergraduate students may transfer a maximum of 90 undergraduate credits into undergraduate programs at Unity College. Students must earn a 'C-' (1.7) or higher for the credit to be accepted for transfer. The credit-granting institution must also be accredited by a Department of Education-recognized regional or national accrediting body. If an institution is accredited by a DOE recognized agency but has programs and/or courses which are not eligible for Title IV funding, that coursework is not transferable for credit. Some coursework may not be eligible for credit transfer, including remedial/fundamental coursework.

Advanced Placement® (AP®) exams are eligible for transfer credit and count toward the 90-credit maximum for undergraduate students. A minimum score of 4 is required to earn credit for mathematics and biology courses. For all other courses, a minimum score of 3 is sufficient.

College Level Examination Program® (CLEP®) exams are also eligible for transfer credit and count toward the 90-credit maximum for undergraduate students. Unity College follows College Board recommendations for minimum scores when processing transfer credit.

DSST® is a credit-by-examination program often utilized by members of the military. DSST® scores can be submitted to earn college credit toward a degree program. Unity College will utilize current ACE® recommendations for the minimum passing score and amount of credits to be awarded.

Unity College accepts credits from the International Baccalaureate Diploma Programme for courses graded with a 5 or higher if applicable to the student's major at the college. International Baccalaureate credits are subject to transfer credit limitations.

GED® exams may be eligible for transfer credit and count toward the 90-credit maximum for undergraduate students. Unity College follows the recommendations of the American Council on Education (ACE®) guidelines for minimum scores when processing transfer credit. Students may receive up to 3 credits of math elective, 3 credits of biology elective, 3 credits of humanities elective, and 1 credit of general electives based on individual test subject scores.

Active and former military members may receive transfer credit by submitting a Joint Services Transcript. Courses will be evaluated per ACE® recommendations and can be applied to the major (if relevant) or toward general electives.

Students enrolled in an undergraduate certificate may not transfer more than 25% of that certificate's required credits.

Unity College reserves the right to determine the eligibility of transfer credits. Transfer credits count only toward the total earned hours, not undergraduate grade point averages.

Graduate students may transfer a maximum of nine (9) graduate credits into graduate programs at Unity College. All coursework transferred must apply to the degree requirements of the program the student is enrolled in. Students must earn a 'B' (3.0) or higher for the credit to be accepted for transfer. The credit granting institution must also be accredited by a recognized regional or national accrediting body. Credits should be transferred at the time the student is admitted and will be reviewed by the Registrar's Office, in consultation with the deans. Transfer credits count only toward the total earned hours, not graduate grade point averages. Transfer of credits from other approved graduate programs will be considered on a case-by-case basis by the Registrar's Office in consult with the Deans.

Transfer of Credits for Prior Learning

Undergraduate students may receive up to 30 credits toward a program through Credit for Prior Learning and no more than a total of 90 credits combined with prior learning and transfer credits. Graduate students may receive up to six credits towards a degree program through Credit for Prior Learning. Students must apply through the Credit for Prior Learning Assessment process. All applicants must submit a portfolio that justifies the credits requested for award. The Distance Education Curriculum and Assessment Task Group reviews submitted portfolios and provides a recommendation to the Vice President of Distance Education. The Vice President of Distance Education is responsible for the final decision. The following categories are ways that students may qualify to receive through prior learning experiences:

- Credit for professional licenses and credentials earned
- Credit of a prepared portfolio documenting skills and knowledge
- Credit for exams, trainings, or certifications received

Portfolio must include the following information:

•Course Information - Includes the learning outcomes for the specific course you are challenging.

•Summary Sheet - Matches each course learning outcome to your experience and supporting evidence.

•Resume and Biographical Essay - Provides an overview of your learning experiences related to the course.

•Narrative - Demonstrates how you have achieved each course learning outcome.

•Documentary Evidence - Supports your claims to knowledge of the learning outcomes

Transfer of Credits from a Quarter System

Unity College recognizes that some students may transfer in credits earned from a quarter credit system. To convert quarter hours to semester hours, multiply the

number of quarter credits earned by 2/3. For example, a course earned at 4.5 quarter credits converts to 3 semester credits.

When the conversion of credit hours completed results in a fraction, the number of credit hours will be rounded up for the benefit of the student by 0.5 semester credits. For example, a course earned at 4 quarter credits converts to 2.67 semester credits, which is rounded up to 3 semester credits. A course earned at 5 quarter credits converts to 3.33 semester credits, which is rounded up to 3.5 semester credits.

International Transfer Credit

International transcripts must be evaluated by a NACES®- or AICE®-approved agency to determine U.S. credit equivalency. Unity College will not consider foreign credits for transfer without the agency evaluation.

SECTION 3: EXPENSES AND FINANCIAL AID

Cost of Attendance

Undergraduate courses cost $470 per credit hour. Books, software, hardware, and other materials are not included in the credit hour cost and must be purchased separately.

Graduate courses cost $650 per credit hour. Books, software, hardware, and other materials are not included in the credit hour cost and must be purchased separately.

Military Differential Tuition: All distance education courses are reduced by 10% for veterans or active military members and their dependents.

Billing

Students will be billed for each term after registering for their courses, and all student accounts must be settled and any financial aid in place before the end of the add/drop period (day 3 of the term). Any outstanding balance will lead to automatic withdrawal from courses. Any outstanding balance must be paid prior to future enrollment.

Failure to Pay

Failure to pay bills in full when due may result in revocation of Unity College privileges, including but not limited to, issuance of grades and/or transcripts, registration for subsequent terms, participation in graduation ceremonies, and participation in registered classes and examinations. It is imperative that a student contact Student Financial Services if any charges are disputed.

Refund Policy

Distance Education students who drop a course, whether they are active or not, before the end of the add/drop period are eligible for a 100% tuition refund for that course. After midnight of the last day of add/drop, students are no longer eligible for a refund.

If a student takes no action to drop a course and stops participating in the class during the add/drop period, the institution will take action to withdraw the student and the student will be held accountable for the total cost of the course.

Failure to Participate

Students who fail to participate in their course within the first three (3) days (as defined by a minimum of one discussion forum post) may be automatically dropped from the course.

Financial Aid

Your federal need will be determined based on the income and asset information

you provide on the Free Application for Federal Student Aid (FAFSA) online at fafsa.gov. Choose Unity's College Code (006858) to ensure that the federal application data will be transmitted to the Financial Aid Office. Please respond promptly to requests for additional information or clarification concerning your aid application.

Return to Title IV

Students receiving any federally sponsored financial aid, such as Federal Pell Grants, or Federal Stafford Loans, are subject to a separate Federal policy pertaining to the amount of those federal funds they may retain when they withdraw from the college during an academic semester. This policy, called The Return of Title IV Funds Policy, prorates available aid based on the amount of the semester completed. Written examples of the refund calculations are available upon request from Student Financial Services, as well as any further information that may be needed pertaining to the refund or return of Title IV Funds process. Whenever applicable refunds are determined and any federally sponsored programs are involved, the following federally prescribed order of refund distribution is required Prescribed by Law and Regulation TOTAL REFUND:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Perkins Loan
4. Federal PLUS Loan
5. Federal Pell Grant
6. FSEOG
7. Other Title IV Aid Programs

Financial Aid Available for Distance Education Students

Pell Grant
Matriculated undergraduate students who complete a FAFSA may be eligible for the Pell Grant. This need-based award does not need to be paid back.

Federal Supplemental Education Opportunity Grant
Matriculated undergraduate students who receive Pell Grant are eligible for this grant based on fund availability. This award is to Pell-eligible students.

The Direct Subsidized Loan Program
Matriculated undergraduate students enrolled in three (3) or more credit hours per 5-week term may complete a FAFSA for consideration for this loan. The maximum annual award is based on the student's year in college. The total undergraduate amount a student may receive is $23,000.

Repayment on the Subsidized Loan starts no sooner than six (6) months after you graduate or fall below half-time status. There is a ten-year repayment period and

other re-payment options.

The Direct Unsubsidized Loan Program

Matriculated undergraduate students enrolled in three (3) or more credit hours per 5-week term may complete a FAFSA for consideration for this loan. The maximum annual award is based on the student's year in college. The total undergraduate amount a student may receive is $34,500.

Matriculated graduate students enrolled in three (3) or more credits per 8-week term may complete a FAFSA for consideration for this loan. The maximum annual unsubsidized loan is $20,500. More information about the Direct Unsubsidized Loan will be provided to qualifying students.

The Unsubsidized Loan starts to accrue interest after payment to your account. While in College, you can elect to pay interest on an Unsubsidized Loan, or have it added to the principal. Repayment on the Unsubsidized Loan starts no sooner than six (6) months after you graduate or fall below half-time status. There is a ten-year repayment period and other re-payment options.

NOTE: Financial Aid is not available for non-degree seeking candidates.

Private Loans

Private loans may be an option if no other sources of financial aid are available. Unity College is not permitted to provide counsel about which private loans to choose. For help on this matter, please visit: http://www.Unity.edu/FastChoice.

SECTION 4: ACADEMIC POLICIES

Definition of a Distance Education Credit

Unity College policy defines one undergraduate credit hour as a semester hour, the standard measure of progress toward a degree at most institutions. For most standard lecture courses, it represents 50 minutes of faculty-directed instruction and 2 hours of self-directed class work each week for a traditional 15-week semester (i.e., one 3 credit undergraduate class is approximately 135 hours of student work). The table below demonstrates how this standard is applied to Unity College's undergraduate term calendar. This credit hour definition follows the guidelines for awarding semester credit hours from the US Department of Education and the New England Commission of Higher Education. While online courses do not have specified time in a physical class, they require an analogous amount of work to a semester credit hour.

Credit Hours	Minimum total required faculty-directed instruction hours	Minimum total student-directed instructional hours	Total Minimum Instructional Hours	Hours per week for 5-week term
3	45	90	135	27

Graduate students are expected to perform not only additional work beyond undergraduate expectations, but to submit work that is more in-depth and of higher quality as befits a graduate-level course. Graduate students are therefore expected to perform roughly a third more work than their undergraduate counterparts. Thus, one Unity College graduate credit hour in an eight-week term is equal to at least 60 hours of student work.

Definition of a non-credit course:

Non-credit offerings may be stand-alone courses or instructional programs that do not offer academic credit. The term "program," in this policy, refers to a series of non-credit courses that may lead to a culminating non-credit certification or credential. Non-matriculated students participating in non-credit courses are considered non-degree students. Non-credit courses will appear on the official Unity College transcript, but do not have final letter grades. Individual assignments, projects, or coursework may receive feedback and/or assessment as relevant to the content and structure of the course. Non-credit courses may be offered simultaneously as a for-credit course; in this case, a student must be registered for the for-credit course by the end of the add/drop period in order to receive academic credit. Participation in non-credit offerings will not yield credit and cannot be converted to academic credit after the fact.

Course Load and Status

The maximum load for all DE undergraduate students is limited to 6 credit hours per 5-week term. Students taking 3 credits per five-week term are considered full time status. To be eligible for financial aid, undergraduate students must be enrolled in at least one 3-credit course per term. Any increases to the recommended maximum load are contingent upon course availability and must be approved by the Vice President of Distance Education or hiring Dean.

The maximum load for all DE graduate students is limited to 6 credit hours per 8-week term. To complete the Master of Professional Science program in one year, a student must enroll in 6 credits for five consecutive terms. To be eligible for financial aid, graduate students must be enrolled in at least one 3-credit course per 8-week term. Any increases to the recommended maximum load are contingent upon course availability and must be approved by the Dean.

Course Registration

Students will register for courses by working with their Distance Education Concierge/Advisor to select courses that are appropriate for their degree completion. Based on the student's academic plan, the Distance Education Team will register the student for courses.

Course Cancellation

No courses in a specific term are guaranteed and the College may cancel courses due to low enrollment and other circumstances prior to a term start. If this occurs, the College will immediately notify the students to discuss options, and the student's advisor will work with the appropriate Academic Dean to find a substitution. Any payments made for canceled courses will be refunded or applied to a different course within the College.

Add/Drop Courses

During the first three class days, students may add or drop courses for the current term. Students should contact their advisor in order to add or drop a course. Reducing or increasing credit hours during the three add/drop days will result in an appropriate tuition and financial aid change.

Attendance/Class Participation

Distance Education students will be required to complete an initial "log-in" assignment dictated by the respective course instructor by 11:59PM on or before the end of the add/drop period. During the term, the student will be required to complete assignments both in the course portal and outside of it at the direction of the syllabus and the instructor.

In order to comply with federal financial aid regulation, Unity College is providing the following procedural guidance: A student is active in an online course (or the online

portion of a hybrid/blended course) by participating in class or otherwise engaging in an academic activity.

Examples of such activity include but are not limited to:

- Contributing to an online discussion or text chat session;
- Submitting an assignment or working draft; working through exercises;
- Taking a quiz or exam; and/or
- Viewing and/or completing a tutorial.

Examples of academic activity do not include:

- Logging into online classes/discussions without active participation
- Speaking with an instructor or advisor to participate in academic counseling or advising.

Academic activity is readily tracked and documented through the College's learning management system. Students in 8-week terms are required to complete at least one academic activity every 10 days. Students in 5-week terms are required to complete at least one academic activity every 6 days. Students who do not demonstrate academic activity during this time frame will be administratively withdrawn from the course, with an effective date based on their last academic activity. If a student stops posting academic activity, but the last active date is after the withdrawal deadline, the student will be withdrawn from the course. A WF grade will be entered on the student's record.

Courses shorter than the standard 8- or 5-week term may require more frequent activity to remain enrolled as a student. Students cannot self-certify academic activity. Unity College Distance Education does not allow students who are not registered for a course to audit a class for no credit.

Extended Absence

Once a period of enrollment begins, if a student needs to be away from their class for more than three (3) consecutive days based on either a personal or medical issue, the Vice President of Distance Education (VP) or Dean should be notified immediately so that an official notification can be sent to all the student's instructors. The exact reasons need not be revealed to the VP or Dean if there is a confidentiality issue. This does not necessarily constitute an "excused absence," relieve the student of their responsibilities, or change the course expectations.

Course Withdrawal

Students who wish to withdraw from a course must do so by the deadlines in the academic calendar by emailing the course instructor and their Distance Education Advisor. The Distance Education staff will work with the Registrar to complete the course withdrawal. It is the student's responsibility to contact Financial Services to determine any changes based on a course withdrawal

Leaves of Absence and Time Limitation for Degree Completion

Distance Education undergraduate students will have ten (10) consecutive calendar years from their date of matriculation to complete their program of study. Graduate students will have five (5) consecutive calendar years from date of matriculation to complete their program of study. Students who do not meet this deadline will be required to reapply for admission and will be subject to current availability of courses and programs, as well as any new program requirements.

Students who wish to remain unenrolled for more than two consecutive terms, should communicate their intent to the Distance Education Advisor in writing. Any student who does not register for classes for two (2) consecutive terms, but is otherwise eligible to continue study, will remain enrolled in the program, but will temporarily lose access to email, CAMS portal, and library services. Account access will be reinstated when the student returns and registers for coursework.

Any student who is inactive for more than one calendar year will be subject to current availability of courses and programs, as well as program requirements as outlined in the most recent Catalog. Extensions with cause may be requested of the Vice President of Distance Education or the Dean. The final decision rests with the VP.

Withdrawal from the College

Students are considered officially withdrawn when they complete the withdrawal process. The process to withdraw from the College is to first contact their Distance Education Advisor. The Advisor will work with the Registrar to complete the withdrawal. The student is required to complete an electronic Withdrawal from the College Form upon receipt. All grades for courses in progress as of the withdrawal date are recorded as "W" and all relevant offices and instructors will be notified. Courses whose end date has passed and for which all work has been completed will still receive the grade earned before the withdrawal.

Students may also be considered unofficially withdrawn when a student is assigned all "F" or "F" and "W" grades at the end of the semester.

The Registrar will attempt to establish if the student earned at least one of their "F" grades. If the Registrar cannot reasonably establish the earning of the grade [academic participation through the entire semester] in at least one course, the student will be considered withdrawn. Refunds are based on the published refund schedule and determined by date of withdrawal.

Medical Withdrawal from the College

Students may request a medical withdrawal when an illness or injury occurs that makes it impossible for the student to continue with classes. A medical withdrawal may be used in response to matters of both physical and mental health. To be recorded as a medical withdrawal, documentation from a licensed medical practitioner must be submitted to the Vice President of Distance Education or Dean outlining the nature of

the illness or injury and confirming that the student would not be able to complete coursework as a result. Medical withdrawals will be dated according to the date that the College was notified of the intent to withdraw. The regular refund policies of the College apply. Medical withdrawals can be recorded up to the last day of class for the term. All documentation from a medical professional must be received before the last day of classes for the withdrawal to be considered medical. In the case of a medical withdrawal, all grades are recorded as "W" if the effective date is prior to the withdrawal deadline, and all relevant offices and professors will be notified.

Students are strongly encouraged to take a full term away from the College to address the medical issues before seeking to return. Depending on the situation and the time in the term that the withdrawal takes place, this may be a required condition of the withdrawal/readmission. Students who leave on a medical withdrawal will be asked to submit confirmation that they have addressed the medical condition and are ready to return to full participation in the educational program of the College. This may require documentation from a licensed medical practitioner.

Date of Withdrawal

A student is considered "withdrawn" as of the day they begin the official withdrawal process or notify their Advisor or designee of their withdrawal. Official notice must be written or emailed. In the case of written notice, the date of withdrawal will be the date the written notice is received. Students who do not provide official notice will have their last date of recordable academic activity used as their date of withdrawal.

Academic activity includes [but is not limited to]:

- Submitting academic assignments
- Participating in online discussions

Academic activity does not include:

- Logging into online classes/discussions without active participation
- Speaking with an instructor or advisor to participate in academic counseling or advising

A student cannot self-certify academic activity. Unity College must be able to establish the date via electronic record. If a student is unable physically or mentally to begin the withdrawal process the school may use the date of the related circumstance [such as an automobile accident] or the date of last academic activity.

Grading Policy

Undergraduate Grading Scale

A	(94-100%)	Excellent
A-	(90-93.9%)	
B+	(87-89.9%)	
B	(84-86.9%)	Good
B-	(80-83.9%)	

C+	(77-79.9%)	
C	(74-76.9%)	Satisfactory
C-	(70-73.9%)	
D	(60-69.9%)	Poor, but Passing
F	(0-59.9%)	Failing

Graduate Grading Scale

A	(94-100%)	Excellent
A-	(90-93.9%)	Very Good
B+	(87-89.9%)	
B	(84-86.9%)	Satisfactory
B-	(80-83.9%)	Satisfactory, but needs improvement
C+	(77-79.9%)	Needs improvement
C	(74-76.9%)	Unsatisfactory
C-	(70-73.9%)	Poor
F	(0-69.9%)	Failing

W – Withdrawal (No credit)

Recorded but not calculated as part of the GPA. Distance Education Faculty may not give a grade of "W." That grade designation is applied by the Registrar's office.

WF – Withdrawal Failure (No credit)

Withdrawal Failure. No credit. Shows the student withdrew after the deadline to withdraw published on the academic calendar. Factors into GPA as a failing (F) grade. Distance Education Faculty may not give a grade of "WF." That grade designation is applied by the Registrar's office.

I – Incomplete (No credit)

An Incomplete "I" is a temporary grade which may be given at the instructor's discretion with the approval of the Dean to a student when illness, necessary absence, or other reasons beyond the control of the student prevent completion of course requirements by the end of the academic term. To submit an Incomplete grade, please contact the Assistant Registrar dedicated to Distance Education to initiate the paperwork.

If a student does not complete the work before the start of the next term, they may not enroll in classes for future terms. Work must be completed by the end of the next term, or the incomplete grade will automatically be changed to an F. Distance Education Faculty considering granting a final grade of "I" must follow the incomplete grade policy and work with a student's advisor to initiate an incomplete grade request. A grade of "I" is not factored into a student's GPA. Credits for an "I" grade are factored into attempted (but not completed) credits for the student's cumulative completion rate.

Incomplete grades may be given only in the following circumstances:

- **80%** of all coursework must be completed with a satisfactory grade;
- An illness or other extenuating circumstance legitimately prevents completion of required work by the due date;
- Required work may reasonably be completed in an agreed-upon time frame;
- The incomplete is not given as a substitute for a failing grade;
- The student initiates the request for an incomplete grade before the end of the academic term;
- The instructor and student complete the "Application for Incomplete Grade" form before the end of the academic term.

Appropriate grades must be assigned in other circumstances.

The following provisions for incomplete grades apply:

- The faculty member initiates the digital "Application for Incomplete Grade" in consultation with the student, Assistant Registrar, and the Dean.
- The course work may be completed while the student is not enrolled.
- If Incomplete grades are not resolved by the following academic term, Incomplete grades will change to 'F' and affect GPA. The Dean reserves the right to make exceptions to this policy on a case by case basis.
- An Incomplete grade may not be considered passing for purposes of determining academic standing, federal financial aid eligibility, or other purposes.
- Students who receive an incomplete grade in a course cannot re-register for the course in order to remove the "I".
- If the faculty member is not available to grade the incomplete work, the Dean will grade it or find a designee.

Calculating Grade Point Average (GPA)

To determine a graduate student's grade point average (GPA), Unity College uses the following system of quality points:

Letter Grade	4.0 Scale
A	4.0
A-	3.7
B+	3.3

B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D	1.0
F	0.0

Change of Final Grade

Except for the grade of "Incomplete," final course grades are not changed after submission to the Registrar except to correct an entry error, or in the result of a successful student grade appeal.

Change of Final Course Grade - Process for Instructors

If an error has been made in the calculation or transcription of the original grade, the instructor will notify the Dean of the error, and the corrected grade will be sent to the Registrar's Office to be processed. An instructor who wishes to change a grade for any other reason must send the request with documentation to the Dean for consideration. The Dean will review the evidence, seek additional information if necessary, and decide the appropriate course of action. If the change is approved, the Dean will forward the change to the Registrar's Office with the appropriate documentation.

Appeal of Final Course Grade - Process for Students

If a student disagrees with their final grade for a course, they may initiate a conversation about it with the instructor. After this conversation, should a student wish to appeal the final course grade, they may appeal the grade to the Dean and Vice President (VP) of the Business Unit offering the course. The appeal must be submitted in writing no later than 30 days after the final grade was submitted. The Dean and VP will review the appeal along with any other supporting documentation and information provided by the student and the instructor and decide on the appeal within 10 business days. The VP's decision is final.

Repeating Courses

Students with a need to earn a higher grade may repeat a previously taken course. While the grades for both the first and subsequent attempts will remain on the student's transcript and the academic record, the highest grade will be used in computing the cumulative grade point average. Credit can only be earned once for a course, unless specifically stated otherwise in the course description. Courses completed with a grade of C or higher may only be repeated once. Students should be aware that financial aid will cover retaking a previously passed course once.

Class Standing

Class standing is determined by the number of credits completed by the student, including those accepted in transfer from other institutions based on the ranges below.

Freshman: 0-29 credits
Sophomore: 30-59 credits
Junior: 60-89 credits
Senior: 90+ credits

Academic Standing

Students must meet the following requirements, both qualitative and quantitative to be considered in good academic standing and eligible for Federal Financial Aid. Students not meeting the academic minimums necessary to progress toward a degree are provided with specific requirements to achieve good academic standing, which they must meet within a defined time period. Academic standing is evaluated annually.

Satisfactory Academic Progress

Good academic standing for **undergraduate** students is defined as:

1. Receiving credit for at least 67% of Total Attempted Credits. All students must complete 67% of their attempted credits in order to remain in good academic standing. To find this percentage, divide the number of credits you have earned by the number of credits you have attempted. (Total attempted credits are defined as the total number of credits a student is enrolled in at the end of the Add/Drop period of each term, and cumulatively includes all accepted transfer credits.)
2. Maintaining the minimum Cumulative Grade Point Average requirement of 2.00
3. Being mathematically able to complete your degree program in a timeframe of no more than 150 percent of your program's average length.

Good academic standing for **graduate** students is defined as:

1. Receiving credit for at least 75% of Total Attempted Credits. All students must complete 75% of their attempted credits in order to remain in good academic

standing. To find this percentage, divide the number of credits you have earned by the number of credits you have attempted. (Total attempted credits are defined as the total number of credits a student is enrolled in at the end of the Add/Drop period of each term, and cumulatively includes all accepted transfer credits.)

2. Maintaining the minimum Cumulative Grade Point Average requirement of 3.00
3. Being mathematically able to complete your degree program in a timeframe of no more than 150 percent of your program's average length.

Failure to Meet the Minimum Standards

Failure to meet the minimum standards of satisfactory academic progress will result in suspension from the institution, and from receiving Financial Aid. There is no formal "warning" to a student who is not meeting the standards before suspension; however, the Distance Education staff will monitor students and offer assistance to students who show signs of being unsuccessful. This suspension can be put into place at any time during the academic year and does not require the formal Satisfactory Academic Progress review to have taken place. Suspensions may be appealed by the student.

Suspension and Dismissal

The College reserves the right to suspend or dismiss a student from the College at any time when academic work is unsatisfactory or when conduct is deemed detrimental to the teaching and learning goals of the College community. Suspension may be appealed by the student.

Appeal of Financial Aid Suspension and Academic Dismissal

A student who documents in writing extenuating circumstances that could not be prevented, may request reconsideration of their suspension. Students must submit their appeal within 7 calendar days of final official grades being posted to the student portal OR before enrollment in a new term begins, whichever occurs first. If a student does not appeal their dismissal, or if their appeal is not granted, students may not participate for at least one academic term before applying for readmission.

Please note that appeals that do not clearly outline the circumstances which lead to academic difficulty, and what steps have been taken to overcome those circumstances, will not be considered. Appeals are submitted to Registrarsoffice@unity.edu.

In addition to the student's written appeal, the panel (composed of Unity College Staff and Faculty) may consider documented feedback from faculty and staff, letters of support, and other documentation received from the student or other offices on campus. This documentation may be requested from Unity College employees by the student or the panel. Students are encouraged to request the submission of documentation that supports the changes the student has made to make them successful. Students may, and are encouraged to, provide documentation from

outside sources such as a medical professional, or other professionals who are assisting the student overcome their challenges.

The panel's determination will be based on evidence of extenuating circumstances beyond the student's control, as well as the student's likelihood for success upon readmission. Likelihood of success will be based on the student's outlined plans to overcome the circumstance, documentation submitted to the panel, and the student's past academic performance. The student will be notified of the panel's decision no later than 7 calendar days after the deadline to appeal suspensions.

Probation

Students who successfully appeal their suspension will be placed on probation. Students must meet the requirements to be in good academic standing within their one term probation period to continue attendance and receive Federal Financial Aid. Students for whom it is mathematically unlikely to achieve good standing in the one-term probation will be placed on an academic plan. This plan must be crafted and approved by the end of the add-drop period of the first term of probation. If a student on probation does not meet the requirements of their academic plan, they are suspended with a right to appeal per the appeal policy above.

After one term on probation, VA benefits will not be certified by Unity College until such a time when the reason for the unsatisfactory progress no longer exists.

Academic Plan

An academic plan allows the student additional time to obtain good academic standing. This individualized plan is created by the Academic Advisor for graduate students and undergraduate students in consultation with other College officials as needed. The plan will have quantitative and qualitative goals that the student must meet in the outlined time frame of the plan. This may include certain progress levels at the end of specific terms. Should a student wish to make changes to their Academic Plan, they must appeal at the end of a term to the panel to do so.

Students who meet the conditions of their plans will continue to be on probation until they complete their plan and obtain Satisfactory Academic Standing. Failure to meet the outlined plan will result in academic and financial suspension. A student may not appeal a second time for the same circumstance.

Graduation

Application for a Degree

There are three (3) times each year when degrees are conferred and printed: December, May, and August. Applications for degrees are accepted on a rolling basis prior to the conferral of the degree. Upon receipt of the application to the Registrar's office, students will be billed a $100 fee. The application and fee must be submitted in order to receive a degree, even if the student does not plan to attend a commencement ceremony.

Diplomas are not handed out at the Commencement Ceremony. Processing

completion of degree requirements may take up to thirty (30) days. Diplomas will be mailed once the academic records are certified and all financial obligations to the College have been resolved.

Participation in a Commencement Ceremony

Unity College celebrates Commencement with an official ceremony at the Unity, Maine campus each May. There is a smaller ceremony on campus each December. Distance Education graduates who wish to travel to the Unity, Maine campus are welcome to participate in Commencement.

Students who have met all academic requirements to receive their diploma or are within six (6) credits of meeting all the graduation requirements set forth by Unity College are invited to participate in a commencement ceremony.

Students who are eligible and wish to participate in a commencement ceremony must:

1. Submit an application for degree by the appropriate deadline (September 15, February 15, or June 15).
2. Have a degree audit completed by the Registrar's office and be within 6 credits of completing their degree.
3. Pay a $100 fee. You may participate in a commencement ceremony only once per degree.

Students that apply after November 1 to graduate in December may not have their information published in commencement materials (program, slideshow) or receive regalia prior to the ceremony.

Students that apply after March 30 to graduate in May might not have their information published in commencement materials (slideshow) or receive regalia prior to the ceremony. After April 10, they may also fail to appear in the program.

Once the completion of requirements has been verified, a diploma will be issued at the next available conferral opportunity (December, May, or August). The diploma will be mailed to the student within six (6) weeks of their conferral date.

Academic Honors

Honor designations for baccalaureate degrees are cum laude, magna cum laude, and summa cum laude.

Cum laude is awarded to a degree candidate who graduates with a minimum GPA of 3.50 in all course work taken at Unity College.

Magna cum laude is awarded to a degree candidate who graduates with a minimum GPA of 3.7 in all course work taken at Unity College.

Summa cum laude is awarded to a degree candidate who graduates with a

minimum GPA of 3.90 in all course work taken at Unity College.

Replacement Copies of Diplomas

Graduates may submit a request for a replacement diploma through the Registrar's Office. Replacement diplomas shall carry all information contained on the original, except that all signatories will be current administrators. Graduates requesting a replacement diploma will be subject to the current fee for such diplomas.

Unclaimed Diplomas

Unclaimed, undeliverable, or withheld diplomas are retained in the Registrar's Office for a period of (5) five years, after which they may be destroyed. Graduates wishing to replace an unclaimed, destroyed diploma must request a replacement diploma as described above.

Second Bachelor's Degree

A student who has completed a bachelor's degree from an accredited institution may pursue a program leading to a second bachelor's degree at Unity College. This includes students who have graduated with a bachelor's degree from the Unity College Flagship campus. In this case, the student must complete the following requirements to earn a Unity College bachelor's degree:

1. Complete the Environmental Professional Core (15 credits)
2. Complete the Major Core for the program (credits dependent on major)
3. Earn a minimum of 30 credits at Unity College
4. Maintain a cumulative GPA of 2.00 or higher
5. Some programs may require the completion of identified prerequisite courses. If a student has not completed the course(s) identified in their previous degree, they may be required to take them at Unity College.

Second Master's Degree

Students enrolled in one master's degree program may wish to pursue a second master's degree at Unity College. For students pursuing two master's degrees, up to 9 credits may be shared between the two degrees. Students must complete at least 21 credits of unique coursework for each degree. This requirement applies to students pursuing a second master's degree after completing a first master's. If the two programs do not have 21 credits of unique coursework already, students may be required to take additional courses to meet the minimum credit requirement.

SECTION 5: UNDERGRADUATE ACADEMIC PROGRAMS

Animal Health and Behavior

The B.S. in Animal Health and Behavior degree prepares students for careers at zoos and aquariums, in the veterinary fields, as animal welfare officers, and for a future focused on the care and well-being of wild and captive animals around the world. This degree provides students with the essential knowledge and professional skills to succeed in settings such as veterinary medicine degree programs, companion and wild animal care facilities, wildlife rehabilitation, and preserves.

Graduates of the B.S. in Animal Health and Behavior will be able to:

1. Explain biological, ethical, psychological, medical, legal, and social concepts underlying the care and maintenance of wild and captive animals.
2. Choose and implement appropriate laboratory techniques used in the care of animals in both wild and captive settings.
3. Identify and explain the training, health, and habitat needs for optimal wild or captive animal health.
4. Critically evaluate information using scientific and quantitative reasoning skills.

<u>General Education Core</u>

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 101 College Algebra for Environmental Professionals

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology

An Arts course

2 Communications courses

A Humanities course

A Language course

<u>Environmental Professional Core</u>

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **<u>or</u>**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

ANIM 103 Animal Training and Care

ANIM 205 Animal Nutrition

ANIM 301 Animal Husbandry and Genetics

ANIM 302 Animal Comparative Anatomy

ANIM 304 Animal Comparative Physiology

ANIM 305 Animal Health and Disease

ANIM 307 Designing Captive Animal Environments

ANIM 401 Animal Care Technical Skills

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

BIOL 301 Animal Behavior: The Evolution, Ecology, and Social Behavior of Animals

40 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Animal Science

The B.S. in Animal Science prepares students to apply animal biology, chemistry, nutrition, and physiology to the study of animal breeding and genetics, growth, behavior, and management. The curriculum can be applied to a great variety of species, from livestock to companion animals to pets. The animal science major provides excellent preparation for students who wish to find positions immediately upon graduation, as well as those who plan to enter graduate or veterinary schools to obtain advanced degrees.

Graduates of the B.S. in Animal Science will be able to:

1. Describe basic principles of animal genetics, nutrition, reproduction and physiology, and explain how they inform best practices in animal husbandry
2. Apply knowledge of animal husbandry, behavior and handling

techniques to effectively interact with animals in a safe and humane manner.
3. Describe the breadth of animal sciences in terms of the variety of career paths, the diversity of the animal industries, and the many roles of animals in society.
4. Use scientific methods in solving 'real-world' problems including collecting and evaluating information, forming predictions, collecting and interpreting data and implementing action.
5. Effectively use communication skills (both oral and written) to build and sustain professional relationships and engage in productive discourse and/or work related to challenging issues with animals at local, national, and/or international levels.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 201 Statistics for Environmental Professionals **or**

MATH 215 Calculus

An Arts course

2 Communications courses

A Humanities course

A Language course

A Social Science course

Environmental Professional Core

COMM 303 Communicating to Stakeholders **or**

COMM 403 Environmental Crisis Communication

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

ANIM 205 Animal Nutrition
ANIM 301 Animal Husbandry and Genetics
ANIM 302 Animal Comparative Anatomy
ANIM 304 Animal Comparative Physiology
BIOL 301 Animal Behavior: The Evolution, Ecology, and Social Behavior of Animals
BIOL 310 Microbiology
BIOL 315 Cell Biology
CHEM 103 Chemistry II
CHEM 104 Chemistry II Laboratory
CHEM 201 Organic Chemistry I
CHEM 202 Organic Chemistry I Laboratory
CHEM 301 Biochemistry
CHEM 302 Biochemistry Laboratory
27 credits of general electives

Please work with your advisor to choose your track.

Companion Animal Care and Training Track

ANIM 103 Animal Training and Care
ANIM 306 Understanding the Role of Emotional Support and Service Animals

Sustainable Livestock Management Track

ANIM 310 Sustainable Livestock Health, Nutrition, and Care
ANIM 410 Sustainable Livestock Management

Equine Science and Management Track

ANIM 315 Equine Health, Nutrition, and Care
ANIM 415 Horse Facility Management

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Geospatial Technologies

Geospatial Technology is an emerging field of study that includes Geographic Information System (GIS), Remote Sensing (RS), and Global Positioning Systems (GPS). Geospatial technology enables us to acquire data that is referenced to the earth and use it for analysis, modeling, simulations and visualization. It also allows us to make informed decisions based on the importance and priority of resources, most of which are limited in nature. With the explosion of access to spatial data and spatially enabled tools such as location-based cellular phones and vehicle navigation systems, these technologies are also quickly becoming an essential part of everyday lives and for solving problems such as climate change. The Geospatial Technology discipline is one of the fastest growing industries, providing skilled GIS professionals to the following disciplines: environment, sustainability, conservation, commerce, politics, medicine, military, and emergency response. Students will learn the application of these technologies in the context of solving environmental problems and finding a fulfilling career.

Graduates of the B.S. in Environmental Geospatial Technologies will be able to:

1. Create, organize, interpret, and analyze geospatial data.
2. Identify and quantify environmental geospatial patterns.
3. Use geospatial technology to help address local, regional, and global environmental problems.
4. Develop GIS workflows and solutions based on the environmental needs.
5. Collect and analyze data from various geospatial sources.

<u>General Education Core</u>

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 101 College Algebra for Environmental Professionals

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology

An Arts course

2 Communications courses

A Humanities course

A Language course*

<u>Environmental Professional Core</u>

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**
EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste
EVPC 301 Environmental Justice **or**
EVPC 305 Building a Better World: Ethical Decision-Making
EVPC 401 Transformational Leadership
EVPC 490 Transdisciplinary Capstone

Program Core
CIST 101 Introduction to Coding for Environmental Applications*
COMM 303 Communicating to Stakeholders
BIOL 305 Conservation Biology **or**
ENCJ 305 Natural Resource Law and Policy
GISC 101 Introduction to Geographic Information Systems (GIS)
GISC 201 Geographic Information Systems for a Changing World
GISC 301 Applied Spatial Analysis and GIS Application
GISC 303 Conservation Cartography and Visualization
GISC 305 Environmental Impact Using Remote Sensing
GISC 307 Field Data Collection for GIS
GISC 401 Advanced GIS Analysis for Environmental Solutions
40 credits of general electives

**CIST 101 will not fulfill the language requirement for this degree program.*

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Health and Safety

The B.S. in Environmental Health and Safety prepares students to work as environmental health and safety project managers and program specialists for business, non-profit, and government. Students obtain skills in pollution prevention and control, waste management, EHS safety management and compliance. Graduates help their employers produce goods and services that reduce environmental contamination, protect workers from hazardous conditions, and use less energy and promote natural and wildlife conservation. The program focuses on environmental responsibility and accountability and promotes being good stewards of the products people make and the services people provide. Upon completion, students will be

prepared to take a variety of OSHA certifications.

Graduates of the B.S. in Environmental Health and Safety will be able to:

1. Identify common sources of environmental pollutants and describe the natural processes that impact their dispersal, interactions, and degradation in various environments.
2. Apply health and safety principles and practices to promote environmental sustainability.
3. Develop a professional development plan to pursue additional education and/or attain professional certification (examples: CHMM, CSP, QEP, etc.).
4. Assess the political, legal, economic, and social dynamics associated with environment issues and the management of environmental health and safety.
5. Evaluate information using scientific and quantitative reasoning skills.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology

An Arts course

2 Communications courses

A Humanities course

A Language course

Environmental Professional Core

COMM 303 Communicating to Stakeholders **or**

COMM 403 Environmental Crisis Communication

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

ENCJ 305 Natural Resource Law and Policy

ENCJ 401 Environmental Compliance, Regulation, and Mitigation

ENVS 101 Sustainable Solutions to Globalization

ENVS 303 Social Science for Environmental Professionals

ESCI 101 Geology and Our Environment

ESCI 305 Environmental Remediation and Toxicology

ESCI 401 Environmental Science Field Techniques

EVHS 205 Occupational Safety and Health

EVHS 210 Fire Protection and Safety

EVHS 305 Construction Safety

EVHS 405 Corporate, Non-profit, and Government EHS Management

EVHS 410 Sustainable Product Stewardship

PSYC 301 Environmental Psychology

31 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Health and Wellness Management

Concerns about employee health and productivity, as well as climate change and the environment, are on the rise, and many employers are implementing wellness and sustainability initiatives. These organizations need qualified professionals with the training to lead successful wellness programs that result in healthier (and happier) people. Students in the B.S. in Environmental Health and Wellness Management program learn key skills and concepts such as fundamental knowledge of human health, behavior change, and healthcare benefits to design wellness programs for their community, businesses, non-profits, and government.

Graduates of the B.S. in Environmental Health and Wellness Management will be able to:

1. Draw on fundamental knowledge of human health (at individual and population levels) and behavior change to critique and design health and wellness programs.
2. Propose appropriate policies and approaches to promote healthy lifestyles and wellbeing.

3. Apply marketing and communications strategies to promote wellness programs.
4. Use technology such as social media, digital health coaching, mobile applications, and wearables to support wellness program goals.
5. Develop a compliant, strategic plan for a comprehensive wellness program for a community, a business, a non-profit, or government organization.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology

An Arts course

2 Communications courses

A Humanities course

A Language course

Environmental Professional Core

COMM 303 Communicating to Stakeholders **or**

COMM 403 Environmental Crisis Communication

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

COMM 401 Using Social Media in a Global World

ENCJ 205 Drug Recognition Training

ENVS 303 Social Science for Environmental Professionals

EVHS 205 Occupational Safety and Health

EVHW 105 Introduction to Human Health

EVHW 205 Health Literacy for Managers

EVHW 305 Employee Benefits for Wellness

EVHW 310 Mind, Body, Soul, Planet: Reiki, Yoga and Acupuncture

EVHW 405 Health Coaching: How to Live a Balanced Life

EVHW 410 Worksite Health Environment and Management

MGMT 303 Strategic Management for Social Change

37 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Justice and Social Change

The B.S. in Environmental Justice and Social Change prepares students to recognize the interconnectedness of social and biophysical factors and transfer that knowledge to careers in social justice. In this program, students investigate where inequalities exist and are enabled around the world. Courses in the program tackle global issues where people are susceptible to climate vulnerability; adaptation; environmental health; energy justice; agricultural change; food security; community revitalization; conservation and access to natural areas; conflict mediation, advocacy campaigns, and public opinion; and government and non-government intervention. Students will learn to be data-driven to provide solutions to global issues of human inequity and environmental injustice.

Graduates of the B.S. in Environmental Justice and Social Change will be able to:

1. Describe how globalization impacts socioecological systems.
2. Assess the role of environmental sustainability in the promotion of intersectional justice and equity.
3. Interpret environmental laws and policy and the impact on environmental justice issues.
4. Analyze specific research questions and real-world issues using data-driven practices.

<u>General Education Core</u>

BIOL 103 Biology: Foundations of Life

BIOL 105 Biological Diversity, Ecology, and Evolution

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 201 Statistics for Environmental Professionals

PSYC 101 Introduction to Psychology **or**

SOCI 101 Introduction to Environmental Sociology

An Arts course

2 Communications courses

A Humanities course

A Language course

Environmental Professional Core

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

COMM 303 Communicating to Stakeholders **or**

COMM 403 Environmental Crisis Communication

ENCJ 305 Natural Resource Law and Policy

ENVJ 201 Understanding Diversity and the Environment

ENVJ 203 History of Creating Environmental Social Change

ENVJ 301 Energy Justice: Local to Global Perspectives

ENVJ 303 American Government: Foundations in Environmental Law

ENVJ 305 Sustainable Design and Justice

ENVJ 307 Food Systems and Social Justice

ENVJ 401 Seminar in Environmental Justice: Balancing Equity, Environment, and Enterprise

48 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Science and Climate Change

The B.S. in Environmental Science and Climate Change degree enables students to work effectively as environmental inspectors, consultants, engineers, or urban/regional planners. Learning through the lens of climate change adaptation and mitigation, this program also prepares students with a sound understanding of modern environmental issues and the professional skills needed for effective functioning in modern natural resource organizations.

Graduates of the B.S. in Environmental Science and Climate Change will be able to:

1. Assess the political, legal, economic, and social dynamics associated with environment issues and the management of environmental issues.
2. Draw on cross-disciplinary knowledge in the biological, physical, and social sciences to propose, evaluate, and explain management solutions to environmental problems.
3. Explain pressing environmental issues through the lens of climate change.
4. Choose and implement appropriate laboratory techniques for environmental analysis
5. Evaluation information using scientific and quantitative reasoning skills.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 201 Statistics for Environmental Professionals

An Arts course

2 Communications courses

A Humanities course

A Language course

A Social Science course

Environmental Professional Core

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

BIOL 201 Organisms that Sustain the Earth: Understanding Plants

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

COMM 303 Communication to Stakeholders

ENCJ 305 Natural Resource Law and Policy

ESCI 101 Geology and Our Environment

ESCI 301 Soil Analysis

ESCI 303 Hydrology, Wetlands, and Water Policy

ESCI 305 Environmental Remediation and Toxicology

ESCI 401 Environmental Science Field Techniques

MATH 403 Statistics for Science Professionals

39 credits of general electives

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Environmental Studies

The B.S. in Environmental Studies at Unity College prepares students for a wide range of environmental careers. This transdisciplinary program provides students with a holistic understanding of environmental issues. The program teaches students to use tools and perspectives from a variety of disciplines including the natural sciences, the social sciences, and the humanities to understand the causes and consequences of environmental problems. Graduates will be able to enter a wide variety of environmental careers.

Graduates of the B.S. in Environmental Studies will be able to:

1. Explain their role as environmental actors and citizens in a global context.
2. Describe and explain core environmental concepts through the perspective of multiple disciplines.
3. Consider the perspectives of multiple stakeholders and draw on knowledge of society, ecology, and the economy to propose and/or evaluate solutions to environmental problems.
4. Explain the importance or, and process for, consensus building and

working with groups to solve environmental problems.

General Education Core
ENVS 201 The Warming Planet: Understanding Climate Change
An Arts course
2 Communications courses
A Humanities course
A Language course
A Life Science course
A Quantitative Skills course
A Social Science course

Program Core
EVPC 101 Professional Skills
EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**
EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste
EVPC 301 Environmental Justice **or**
EVPC 305 Building a Better World: Ethical Decision-Making
EVPC 401 Transformational Leadership
EVPC 490 Transdisciplinary Capstone
COMM 303 Communicating to Stakeholders **or**
COMM 403 Environmental Crisis Communication
75 credits of general elective

Please work with your advisor to choose your electives and/or a potential concentration. For concentrations, please see page 50.

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Marine Biology and Sustainable Aquaculture

The B.S. in Marine Biology and Sustainable Aquaculture prepares students for a broad range of careers helping protect, preserve, maintain, and grow marine organisms and environments. Graduates can obtain employment immediately after graduation with

private firms, aquariums, and various government agencies as marine animal trainers, aquaculture scientists, and fisheries technicians. This degree provides students with a broad emphasis on both marine biology and aquaculture and encompasses coursework with the rigor to prepare students for further study in graduate school or even starting their own aquaculture enterprise.

Graduates of the B.S. in Marine Biology and Sustainable Aquaculture will be able to:

1. Explain the underlying biological principles and functioning of marine and aquatic organisms at structural levels ranging from molecular to ecosystem.
2. Choose and implement appropriate laboratory and field techniques used in marine organismal observation, research, management, and care, including those in wild, cultured, and farmed settings.
3. Compare and contrast the major types and components of aquaculture systems, species, and factors as they relate to both environmental and systematics sustainability.
4. Create local, regional, and global solutions to environmental problems in marine biology and aquaculture.
5. Critically evaluate information using scientific and quantitative reasoning skills.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 101 College Algebra for Environmental Professionals

MATH 201 Statistics for Environmental Professionals

An Arts course

2 Communications courses

A Humanities course

A Language course

A Social Science course

Environmental Professional Core

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

MBAQ 105 Introduction to Oceanography

MBAQ 201 Form and Function of Unique Marine Ecosystems

MBAQ 203 Global Diversity of Freshwater and Marine Resources Used in Sustainable Harvest

MBAQ 301 Sustainable Aquaculture Techniques I: Growing Shellfish and Finfish

MBAQ 303 Sustainable Aquaculture Techniques II: Crustaceans and Pathobiology

MBAQ 307 Ichthyology and Fish Health

MBAQ 310 Marine Mammal and Seabird Biology* **or**

MBAQ 315 Diversity of Marine and Aquatic Vegetation*

MBAQ 401 Field Research in Marine Biology and Aquaculture*

39 credits of general electives

**Includes hands-on laboratory or field component option*

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Wildlife Conservation

The Bachelor of Science in Wildlife Conservation degree enables students to work effectively as wildlife biologists, managers, and ecologists for government agencies, environmental non-profits, and environmental consulting businesses. This program emphasizes sustainable management of wildlife species through consideration of the applicable social, economic, and environmental concepts. This program also prepares students with sound understanding of modern environmental issues and the professional skills needed for effective functioning in modern natural resource organizations.

Graduates of the B.S. in Wildlife Conservation will be able to:

1. Describe fundamental ecological, social, legal, and economic concepts underlying modern wildlife management.
2. Identify species of plants, birds, and mammals of management concerns.
3. Describe significant life history traits of plants and animals that influence wildlife habitat management.
4. Identify management strategies for disease control in wildlife populations
5. Demonstrate ability to choose and implement appropriate field techniques used in wildlife management.

General Education Core

BIOL 103 Biology: Foundations of Life

BIOL 104 Biology: Foundations of Life Laboratory

BIOL 105 Biological Diversity, Ecology, and Evolution

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

ENVS 201 The Warming Planet: Understanding Climate Change

MATH 101 College Algebra for Environmental Professionals

MATH 201 Statistics for Environmental Professionals

An Arts course

2 Communications courses

A Humanities course

A Language course

A Social Science course

Environmental Professional Core

EVPC 101 Professional Skills

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation **or**

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

EVPC 301 Environmental Justice **or**

EVPC 305 Building a Better World: Ethical Decision-Making

EVPC 401 Transformational Leadership

EVPC 490 Transdisciplinary Capstone

Program Core

BIOL 201 Organisms that Sustain the Earth: Understanding Plants

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

COMM 303 Communicating to Stakeholders

ENCJ 305 Natural Resource Law and Policy

MATH 401 Statistics for Wildlife Professionals

WCON 201 Wildlife Plant Identification: Wildlands and Wildlife Habitat

WCON 301 Human Dimensions of Wildlife Conservation

WCON 303 Life History and Identification of Birds and Mammals

WCON 305 Wildlife Conservation Genetics

WCON 307 Humans, Parasites, and Wildlife: Understanding the Impact of Insects on Wildlife

WCON 403 Habitat Management for Wildlife

WCON 405 Wildlife Population Management

34 credits of general elective

College Wide Requirements: *A minimum of 120 earned credit hours, 30 credits at the 300 level or above, 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above*

Undergraduate Concentrations

Concentrations are an optional component of the undergraduate degree. While the College will seek to support students pursuing concentrations, course availability is not guaranteed. Students must graduate with all their degree components at the same time; a concentration cannot be retroactively added to an awarded degree based on the completion of additional coursework.

ANIMAL HEALTH AND BEHAVIOR CONCENTRATION

A concentration in Animal Health and Behavior is available to all programs except Animal Health and Behavior.

Select any four of the following:

ANIM 103 Animal Training and Care

ANIM 205 Animal Nutrition

ANIM 301 Animal Husbandry and Genetics

ANIM 302 Animal Comparative Anatomy

ANIM 304 Animal Comparative Physiology

ANIM 305 Animal Health and Disease

ANIM 307 Designing Captive Animal Environments

ANIM 401 Animal Care Technical Skills

EMERGENCY DISASTER MANAGEMENT CONCENTRATION

A concentration in Emergency Disaster Management is available to all programs except Environmental Emergency Management and Law Enforcement.

Select any four of the following:

EMGT 203 Social Justice Issues in Emergency Management

EMGT 301 Public Policy and Planning for Emergency Management and Law Enforcement

EMGT 303 Planning and Responding to Natural Disasters

EMGT 307 Planning and Responding to Cyberthreats and Terrorism

EMGT 403 Implementation of Emergency Management: Simulation and Exercises

ENCJ 201 Law Enforcement and Emergency Management in the Age of Globalization

ENCJ 305 Natural Resource Law and Policy

ENCJ 401 Environmental Compliance and Regulation

ENVIRONMENTAL GIS CONCENTRATION

A concentration in Environmental GIS is available to all programs except Environmental Geospatial Technologies.

Complete both courses below
GISC 101 Introduction to Geographic Information Systems (GIS)

GISC 201 Maps and Graphics for a Changing World

Complete one of the courses listed below

CIST 101 Introduction to Coding for Environmental Applications*

GISC 301 Applied Spatial Analysis and GIS Application

GISC 303 Conservation Cartography and Visualization

GISC 305 Environmental Impact Using Remote Sensing

GISC 307 Field Data Collection for GIS

**Students who elect to take CIST 101 for the concentration will be required to take an additional course to fulfill the general education language requirement.*

ENVIRONMENTAL JUSTICE AND SOCIAL CHANGE CONCENTRATION

A concentration in Environmental Justice and Social Change is available to all programs except Environmental Justice and Social Change.

Select any three of the following:

ENCJ 305 Natural Resource Law and Policy

ENVJ 201 Understanding Diversity and the Environment

ENVJ 203 History of Creating Environmental Social Change

ENVJ 301 Energy Justice: Local to Global Perspectives

ENVJ 303 American Government: Foundations in Environmental Law

ENVIRONMENTAL HEALTH AND SAFETY CONCENTRATION

A concentration in Environmental Health and Safety is available to all programs except Environmental Health and Safety.

Complete all courses below:

EVHS 205 Occupational Safety and Health

EVHS 210 Fire Protection and Safety

EVHS 305 Construction Safety

ENVIRONMENTAL HEALTH AND WELLNESS MANAGEMENT CONCENTRATION

A concentration in Environmental Health and Wellness Management is available to all programs except Environmental Health and Wellness.

Complete all courses below:

EVHW 105 Introduction to Human Health

EVHW 205 Health Literacy for Managers

EVHW 305 Employee Benefits for Wellness **or**

EVHS 205 Occupational Safety and Health

MARINE BIOLOGY AND SUSTAINABLE AQUACULTURE CONCENTRATION

A concentration in Marine Biology and Sustainable Aquaculture is available to all programs except Marine Biology and Sustainable Aquaculture.

Select any four of the following:

MBAQ 105 Introduction to Oceanography

MBAQ 201 Form and Function of Unique Marine Ecosystems

MBAQ 203 Global Diversity of Freshwater and Marine Resources Used in Sustainable Harvest

MBAQ 301 Sustainable Aquaculture Techniques I: Growing Shellfish and Finfish

MBAQ 303 Sustainable Aquaculture Techniques II: Crustaceans and Pathobiology

MBAQ 307 Ichthyology and Fish Health

MBAQ 310 Marine Mammal and Seabird Biology

MBAQ 315 Diversity of Marine and Aquatic Vegetation

MBAQ 401 Field Research in Marine Biology and Aquaculture

WILDLIFE ECOLOGY

A concentration in Wildlife Ecology is available to all programs except Wildlife Conservation.

Select any four of the following:

BIOL 201 Organisms that Sustain the Earth: Understanding Plants

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

WCON 201 Wildlife Plant Identification: Wildlands and Wildlife Habitat

WCON 303 Life History and Identification of Birds & Mammals

WCON 305 Wildlife Conservation Genetics

WCON 307 Humans, Parasites, and Wildlife: Understanding the Impact of Insects on Wildlife

UNDERGRADUATE CERTIFICATES

Environmental Geographic Information Systems (GIS)

Environmental scientists can analyze and interpret environmental data while Geographic Information Systems (GIS) scientists can manage and manipulate data. Unity College's Environmental Geographic Information Systems (GIS) Certificate will prepare students to meld the two by integrating spatial technologies and environmental information.

Hands-on experience through online projects and research will engage students in course activities and allow for increased comprehension of the science, concepts, and skills they need to become leaders in their chosen environmental fields.

Courses taken when earning this certificate can be used towards obtaining a B.S. in Environmental Geospatial Technologies.

Certificate Requirements:
24 credits
2.00 minimum cumulative undergraduate-level grade point average

Program Core

Complete 9 credits from the following:

ENVS 101 Sustainable Solutions to Globalization

ENVS 201 The Warming Planet: Understanding Climate Change

ESCI 101 Geology and Our Environment

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

Complete 15 credits from the following:

CIST 101 Introduction to Coding for Environmental Professionals

GISC 101 Introduction to Geographic Information Systems (GIS)

GISC 201 Geographic Information Systems for a Changing World

GISC 301 Applied Spatial Analysis and GIS Application

GISC 303 Conservation Cartography and Visualization

GISC 305 Environmental Impact Using Remote Sensing

GISC 307 Field Data Collection for GIS

GISC 401 Advanced GIS Analysis for Environmental Solutions

Pre-Veterinary and Graduate School Prerequisites

The Pre-Veterinary and Graduate School Prerequisite Certificate has been designed in consultation with the VMCAS program pre-requisite guide. Students should understand that individual veterinary medicine programs still vary in their individual pre-requisite requirements. Students are responsible for identifying the pre-requisites for the veterinary program(s) they wish to apply to. Whenever possible, Unity College will try to assist students with fulfilling the pre-requisites for their intended program(s).

https://www.aavmc.org/data/files/vmcas/prereqchart.pdf

Certificate Requirements:
24 credits completed
2.00 minimum cumulative undergraduate-level grade point average

Program Core

CHEM 101 Chemistry I

CHEM 102 Chemistry I Laboratory

CHEM 103 Chemistry II

CHEM 104 Chemistry II Laboratory

Complete 16 credits from the following:

BIOL 310 Microbiology

BIOL 315 Cell Biology

CHEM 201 Organic Chemistry I

CHEM 202 Organic Chemistry I Laboratory

CHEM 203 Organic Chemistry II

CHEM 204 Organic Chemistry II Laboratory

CHEM 301 Biochemistry
CHEM 302 Biochemistry Laboratory
MATH 215 Calculus
PHYS 201 Physics I
PHYS 202 Physics I Laboratory
PHYS 203 Physics II
PHYS 204 Physics II Laboratory

SECTION 6: GRADUATE ACADEMIC PROGRAMS

Master of Professional Science Program Goals

The overarching goal of the Master of Professional Science program at Unity College is to train students at an advanced level in sustainability science with attention to professional application.

Goal 1: Graduates of the Master of Professional Science Program will achieve mastery in sustainability science.

Students will demonstrate proficiency in sustainability science through investigating real sustainability issues. Students will achieve mastery through the completion of a sustainability capstone project, coursework, and comprehensive advising. Through the program's transdisciplinary curriculum based in the natural and social sciences, students will have the opportunity to study, understand, and apply sustainability concepts to solve environmental problems.

Goal 2: The Master of Professional Science Program at Unity College will produce graduates prepared to enter the environmental workforce.

Students will demonstrate management and workforce related skills. Program Faculty and Administrators will work closely with businesses, industries and agencies to ensure that the program curriculum aligns with the environmental job market. Courses and experiences will be informed by career expectations, industry needs, and skill expectations.

Goal 3: The Master of Professional Science Program at Unity College will produce graduates that are trained in ethics and effective communication.

Students will demonstrate proficiency in ethics and communication. Early introduction to both, including communication technology, will allow opportunities for feedback and review.

Students will develop skills in written and verbal communication, including the ability to communicate with the broader public.

Students will gain understanding of ethical dimensions and the cultural context where science and society intersect.

Master of Professional Science: Animal Science and Behavior

Using a transdisciplinary process this degree provides students with a deep understanding of animal science and behavior with an emphasis on animal companionship, therapy and service, behavior, rehabilitation and welfare. With an emphasis on developing leadership and management skills, coursework in this degree will prepare students for employment as animal trainers, rehabilitators, and animal service providers.

Program-level Learning Outcomes

Graduates in the Master of Professional Science: Animal Science and Behavior track will:

1. Identify sources of risk to humans and animals in their interactions, as well as processes to minimize risk or harm.
2. Identify and describe positive/fear-free training techniques for animals.
3. Compare and contrast companion, service, emotional support and therapy animals and the rules, regulations, laws and training encompassed by each group.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Environmental Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Animal Science and Behavior Core
ANIM 505 Animal Behavior and Modification
ANIM 605 Advanced Animal Training
ANIM 630 Emotional Support and Service Animals: Rules and Regulations

Complete one of the following tracks:

Canine and Feline Health Care Track
ANIM 510 Canine and Feline Nutrition
ANIM 610 Animal Shelter Best Practices and Management

Equine Health and Care Track

ANIM 520 Equine Nutrition
ANIM 620 Best Management Practices for Ranches and Stables

Master of Professional Science: Environmental Geographic Information Science (GIS)

Environmental scientists can analyze and interpret environmental data while Geographic Information Systems (GIS) scientists can manage and manipulate data. Unity College's Master of Professional Science in Environmental GIScience program will prepare students to meld the two by integrating spatial technologies and environmental information. Students will collaborate with their peers, and current or potential employers to learn concepts and skills necessary to complete their work and research in the program. Hands-on experience through online projects and research will engage students in course activities and allow for increased comprehension of the science, concepts, and skills they need to become leaders in their chosen environmental fields. This multidisciplinary education program will also encourage students to report upon their research through scientific communication to both scientists and the general public upon graduation.

Program-level Learning Outcomes

Graduates in the Master of Professional Science: Environmental GIScience track will:

1. Identify and gather many different types of environmental data produced by government agencies, industry, academia, and popular media.
2. Quality check, analyze, and process spatial data related to real-world environmental issues.
3. Critically analyze course project and capstone research results.
4. Use environmental GIS data and information produced by government agencies, industry, academia, and popular media effectively and with discernment.
5. Identify potential funding sources for research projects and prepare competitive responses to RFPs.
6. Identify and discuss the ethical dimensions and policy issues related to environmental research.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate level grade point average

<u>Professional Skills Core</u>
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Professionals

PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Environmental GIScience Core
GISC 505 GIS and Remote Sensing for Environmental Solutions
GISC 510 Advanced GIS and Remote Sensing for Ecological Applications
GISC 515 Environmental Research Methods
GISC 520 Creating Maps and Graphics of Ecosystem Change
GISC 605 Modeling Our Changing World

Master of Professional Science: Environmental Science

This program is a multi-disciplinary study of the environment, incorporating physical and natural sciences plus natural resource policy, ethics, and management. Graduates of this program could be involved in careers that review environmental impact statements, monitor groundwater quality, and communicate with the public. Students should find employment in various agencies, private sector environmental and engineering firms, environmental consulting, or non-profits.

Program Track Learning Outcomes
Graduates of the Master of Professional Science with a focus in Environmental Science will:

1. Analyze and describe the environment using the physical and natural sciences and associated techniques.
2. Describe the ethical, scientific, and policy strengths and weaknesses of current and proposed environmental solutions.
3. Identify, analyze, synthesize, and communicate scientific information and uncertainties for public and professional audiences.
4. Assess Earth's natural processes using quantitative methods.
5. Apply professional skills to design and conduct a research/capstone project that addresses issues important within the growing environmental science industry.
6. Connect locally-scaled case studies to a global environmental context.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate-level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Program Core
ESCI 605 Water and Soil Resource Management
ESCI 610 Environmental Analysis: Atmosphere, Soil, and Water
GISC 505 GIS and Remote Sensing for Environmental Solutions
MATH 520 Quantitative Reasoning and Scientific Thought
SUST 510 Climate Dynamics

Master of Professional Science: Environmental Studies and Sustainability

Sustainability science is a problem-based, solution-oriented framework for creating a resilient civilization. The framework combines technical sustainability with skills based in the social sciences and humanities to create effective change agents who can work within the context of political, economic, and cultural concerns. Mitigation and adaptation to climate change is emphasized along with biodiversity conservation, resource conservation, and mitigation of pollution. Students within this track should expect to explore, debate, and research possible solutions to climate change from a variety of viewpoints.

Program Learning Outcomes

Graduates of the Master of Professional Science, with a focus in Environmental Studies and Sustainability will:

1. Identify and describe root causes of unsustainability and their impact on current environmental or sustainability challenges.
2. Evaluate sustainability problems and potential solutions from diverse perspectives.
3. Integrate concepts and approaches from social sciences and natural sciences to address environmental problems.
4. Design and conduct a project addressing a sustainability issue using transdisciplinary approaches that engage diverse stakeholders.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Climate Change Sustainability Core
SBUS 515 Ecological Economics
SUST 505 Thinking in Systems
SUST 510 Climate Dynamics
SUST 515 Leading Sustainable Change
SUST 520 Community Planning for Resiliency

Master of Professional Science: Marine Science

Using a transdisciplinary process, this degree provides students with a deep understanding of marine science and ecology, and the implications of the global decline of marine biodiversity and the impact that this decline has on marine ecosystems. With an emphasis on synthesizing scientific literature, data analysis and interpretation, while developing leadership and management skills, coursework in this degree will prepare students for employment as marine project managers, marine scientists and conservation biologists in the government and private sector.

Program Track Learning Outcomes
Graduates of the Master of Professional Science with a focus in Marine Science will be able to:

1. Explain the underlying ecological principles and functioning of marine ecosystems.
2. Create local, regional, and global solutions to environmental problems facing marine predators and their habitats.
3. Analyze the success and failures of sustainable resource management strategies by reviewing federal and state laws and case studies.
4. Demonstrate an understanding of common statistical procedures used in marine science data management and analysis.
5. Demonstrate the ability to interpret quantitative results from scientific literature and other sources, and clearly communicate these results to others.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate-level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Environmental Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Marine Science Core
MARI 505 Dynamics of Marine Ecosystems
MARI 605 Sustainable Management of Marine Resources
MATH 620 Statistics and Data Management for Science Professionals

Complete one of the following tracks:
Conservation of Marine Mammals Track
MARI 520 Identification and Life History of Marine Mammals
MARI 620 Marine Mammal Rescue and Rehabilitation

Conservation of Marine Predators Track
MARI 510 Conservation of Marine Predators
MARI 610 Impacts of Predators on Marine Ecosystems

Coral Reef Biodiversity and Conservation Track
MARI 515 Coral Ecology and Conservation
MARI 615 Coral Reef Restoration and Aquaculture

Master of Professional Science: Urban Ecology and Sustainable Planning

The rapid acceleration of urbanization around the globe has caused a unique set of environmental challenges that must be addressed. Urban ecology examines the relationship between humans and nature in urban environments. This program prepares students to improve the livability, vitality, and sustainability of urban communities. With a focus on environmental and sustainability issues, emphasizing the interactions between wildlife and humans in an urban environment, students develop the leadership skills needed to tackle the quickly evolving environmental issues related to urban ecology and urban planning.

Program Track Learning Outcomes
Graduates of the Master of Professional Science, with a focus in Urban Ecology and Sustainable Planning will:

1. Analyze spatial, qualitative, and quantitative data to address environmental problems.

2. Explore the relationships among social, environmental, and economic systems and assess their role in shaping and managing human behavior.
3. Describe the ethical, scientific, and policy strengths and weaknesses of current and proposed environmental urban ecology and planning solutions.
4. Apply sustainable design principles to effectively collaborate across the multiple professions to design sustainable communities.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate-level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Urban Ecology and Sustainable Planning Core
GISC 505 GIS and Remote Sensing for Environmental Solutions
MATH 540 Quantitative Methods for Sustainable Solutions
UESP 505 Sustainable Design: Green Spaces and Urban Nature
UESP 605 Sustainable Design: Creating Sustainable Buildings
UESP 615 Planning for Human-Wildlife Interactions in Urban Environments.

Master of Professional Science: Wildlife Conservation and Management

This degree track uses a transdisciplinary process for understanding and managing the natural world. Important factors impacting natural communities include climate change and habitat disruption. Understanding the management of the changing environment will be crucial to adaptation and creating sustainable management practices over the coming century. The central distinguishing feature of this degree is its focus on understanding the environment in the context of sustainability science. Students will be expected to be highly inquisitive about the ramifications, motivations and cost of global responses to environmental issues while exploring their own individual ideas.

Program Track Learning Outcomes

Graduates of the Master of Professional Science, with a focus in Wildlife Conservation and Management will:

1. Describe and explain central ideas and foundational assumptions of managing the natural world.

2. Identify and explain fundamental factors and/or processes that impact natural communities, including climate change.

3. Use systems thinking and transdisciplinary strategies to describe and explain natural resource management challenges and approaches.

4. Design and carry out a project that uses a transdisciplinary approach to address a natural resource management or conservation challenge.

Degree requirements:
30 credits earned
3.00 minimum cumulative graduate level grade point average

Professional Skills Core
PROF 505 Strategic Management of Innovation
PROF 510 Communication for Professionals
PROF 515 Ethical Practice and Policy
PROF 590 Capstone I
PROF 690 Capstone II

Complete one of the following tracks:
Conservation and Management Program Core Track
SNRM 505 Human Dimensions of Natural Resource Management
SNRM 507 Wildlife Ecology and Management
SNRM 509 Wildlife Identification
SNRM 515 Conservation Ecology
SUST 510 Climate Dynamics

Professional Wildlife Biologist Program Core Track
MATH 520 Quantitative Reasoning and Scientific Thought
SNRM 505 Human Dimensions of Natural Resource Management
SNRM 510 Landscape Ecology
SNRM 515 Conservation Ecology
SUST 510 Climate Dynamics

GRADUATE CERTIFICATES

Unity College graduate certificate programs in Sustainability and GIScience are developed for working professionals, academics, or people hoping to develop their career. These do not equate to a graduate degree program, but rather they allow students to show that they've mastered a specific area of interest or topic. Graduate certificate programs are for students who already have an undergraduate Bachelor

of Arts or Science.

Certificate in Environmental GIScience

Environmental scientists can analyze and interpret environmental data while Geographic Information Systems (GIS) scientists can manage and manipulate data. Unity College's Environmental GIScience Certificate will prepare students to meld the two by integrating spatial technologies and environmental information. Hands-on experience through online projects and research will engage students in course activities and allow for increased comprehension of the science, concepts, and skills they need to become leaders in their chosen environmental fields.

Certificate Requirements:
15 credits earned
3.00 minimum cumulative graduate level grade point average

GISC 505 GIS and Remote Sensing for Environmental Solutions
GISC 510 Advanced GIS and Remote Sensing for Ecological Applications
GISC 515 Environmental Research Methods
GISC 520 Creating Maps and Graphics of Ecosystem Change
GISC 605 Modeling Our Changing World

Certificate in Sustainability

Sustainability is a problem-based, solution-oriented framework for creating a resilient civilization. Mitigation and adaption to climate change is emphasized along with biodiversity conservation, resource conservation, and mitigation of pollution. Students within this certificate should expect to explore, debate, and research possible sustainability solutions from a variety of viewpoints.

Certificate Requirements:
12 credits earned
3.00 minimum cumulate graduate level grade point average

SUST 505 Thinking in Systems
SUST 510 Climate Dynamics
SUST 515 Leading Sustainable Change
SUST 520 Community Planning for Resiliency

SECTION 7: COURSE DESCRIPTIONS

Undergraduate Course Descriptions

ADVENTURE ECOTOURISM COURSES

TOUR 201 Recreation, Sport, and Ecological Tourism

Ecological tourism is a growing arm of the tourism industry intended to incorporate natural areas using low-impact and sustainable approaches to build tourism opportunities and drive economic growth. This course introduces students to the fundamentals of tourism and differentiates between recreation, sport and ecological tourism businesses and assesses the economic, social, and environmental costs and benefits associated with adventure-based ecological tourism businesses.
Credits: 3
Prerequisites: None

TOUR 203 Minimal Impact Tourism for a Sustainable World

In a world where we have access to some of the most remote places on earth, how do we explore these sensitive ecosystems with as little impact as possible on the landscape and the native people in order to maintain the integrity of the system for others to enjoy in the future? In this course students will draw on historical and current practices in ecological tourism to understand the best practices, sustainable solutions and ethical decision-making principles to develop a business plan for a sustainable ecotourism business.
Credits: 3
Prerequisites: None

TOUR 301 Ecotourism Risk Management and Legal Liability

An integral component to running any business is to have a thorough understanding of risk management and legal liability. In this course students will gain an understanding of the legal liabilities associated with running an ecological tourism business and apply ethical decision making into business planning and practice. Students will develop strategies to mitigate circumstances that may pose risk to the public and/or environment and write a risk management plan for a proposed ecological tourism business.
Credits: 3
Prerequisites: None

ANIMAL HEALTH AND BEHAVIOR COURSES

ANIM 103 Animal Training and Care

This course is an introduction to the requirements for training and caring for animals in

captive and wild settings. Issues covered include habitat maintenance, sanitation, and best care practices. Students will additionally be introduced to and explore the various practices and techniques associated with animal training, with a particular emphasis placed on the skills necessary to train domestic and wild animals for husbandry, handling, and healthcare needs. Best practices related to detailed observation, notation, and data collection will be underscored as students explore the basic principles of animal training and care.
Credits: 3
Prerequisites: None

ANIM 205 Animal Nutrition

This course is focused on the basic concepts of and science behind animal nutrition, including digestion, absorption, dietary requirements, consumption needs from their environment, and formation of regular feedings. This course will introduce the student to the science of animal nutrition. Discussions will be focused on the role nutrition plays in the development of animal disease. A comparative approach will yield insight into the varying nutritional spectrums across animal groups commonly handled by wildlife and veterinary professionals.
Credits: 3
Prerequisites: None

ANIM 301 Animal Husbandry and Genetics

This course provides an in-depth look at the design, implementation, and optimization of breeding animals, with a particular focus on conservation of genetic diversity. Students will explore the principles of genetic and breeding productivity, inheritance patterns and genetic drift, as well as the basics of quantitative and molecular genetics. Methods covered will help students learn how to create, maintain, and improve the genetics of populations in a variety of controlled environments.
Credits: 3
Prerequisites: Completion of at least 60 undergraduate credits

ANIM 302 Animal Comparative Anatomy

This course involves detailed study of the different structural systems found in the global array spectrum of animals, including the underlying evolutionary relationships among the groups. Anatomical structures ranging from the cellular to tissue, organ, and organismal levels will be covered. Functional interpretations of anatomy are stressed, as well as their broader connection to the physiology and health of animals.
Credits: 3
Prerequisites: Completion of at least 60 undergraduate credits

ANIM 303 Animal Science Medical Terminology

Throughout this course, students will become acquainted with multiple veterinary medical concepts, medical terms and scientific principles. Using an approach based on word derivation and combination, students will learn the names and etymology of various animal ailments and diseases, tests used in the analyses of diseases, as well as

the treatments and therapeutic techniques used in alleviation and cure of animal health issues. This course will provide students interested in the veterinary medical fields a ground-up and comprehensive understanding of the complex language of veterinary terminology to be productive in a variety of current or future work environments and help understand more advanced veterinary fields.
Credits: 3
Prerequisites: None

ANIM 304 Animal Comparative Physiology

The course is a systematic study of the function of internal animal systems, from the cellular to the organ-system level. Particular emphasis will be placed on processes supporting organismal homeostasis, with examples from animals commonly found in wild and captive veterinary care. Throughout the term, you will investigate how environmental differences dictate the physiological strategies and responses of animals, including consequences to their health and well-being. Additional work will be focused on processes to collect physiological data, including analysis and interpretation for use in care of their health.
Credits: 3
Prerequisites: ANIM 302

ANIM 305 Animal Health and Disease

Maintenance of health is critical for the care of animals. In this course, students will learn about the most prevalent health issues and how to prevent them. Concepts covered will include disease transmission vectors and pathways, zoonotic diseases, and preventative measures. Particular emphasis will be placed on both the diagnostic processes used to assess animal health, as well as the role animal diseases play in the health of ecological populations, communities, and ecosystems.
Credits: 3
Prerequisites: ANIM 205

ANIM 306 Understanding the Role of Emotional Support and Service Animals

This course will explore the differences between companion, emotional support and service animals. Students will review legislation and organizations that guide the use of animals in public spaces. Additional topics will include key principles of human-animal interactions, potential human health benefits, and current controversies regarding the use of animals for support and service roles. Students will evaluate the best practices of training and caring for emotional support and service animals in a way that maximizes both human and animal safety and wellbeing.
3 Credits.
Prerequisites: ANIM 103

ANIM 307 Designing Captive Animal Environments

This course will engage students in the principles of designing, displaying, and

enriching the environments of captive animals. Topics covered will include creating basic and complex habits in a wide variety of settings, from zoos and aquariums to wildlife preserves, as well as forming environments which promote the enrichment, engagement, and promotion of health outcomes which reflect the animals' natural behaviors while in captivity. Particular emphasis will be placed on promoting animal welfare and creating productive environments for animal husbandry and veterinary care.
Credits: 3
Prerequisites: ANIM 103

ANIM 310 Sustainable Livestock Health, Nutrition, and Care

This course will focus on sustainable practices that lead to proper health, nutrition, and care of livestock animals. Topics include the science behind livestock nutrition and best husbandry practices for monitoring, handling, and training of livestock species. Students will learn how to measure and document livestock behavior and how to use behavior as an indicator of proper health and welfare.
Credits: 3
Prerequisites: ANIM 205

ANIM 315 Equine Health, Nutrition, and Care

This course will lead you through an understanding of equine nutritional needs and the essential elements of maintaining a healthy horse. Students will learn the basics of nutrition, including feeds and feeding, diet, and its relationship to health and performance, plus key environmental factors in horse health. *Please note that you do not need access to a horse, or own your own horse to participate and be successful in this course*.
Credits: 3
Prerequisite: ANIM 205

ANIM 401 Animal Care Technical Skills

In this course, students learn and apply various clinical and laboratory techniques used in the animal care and veterinary medical fields. Emphasis is placed on acquiring new skills and putting the skills to practice to improve abilities. Skills will be focused on those used in both clinic (e.g., drawing blood samples) and lab (e.g., molecular techniques, software applications for analysis) settings, and include reference to those used in wildlife and game preserves (e.g. chemical immobilization).
Credits: 3
Prerequisites: ANIM 103, ANIM 305

ANIM 410 Sustainable Livestock Management

In this course students will learn how to integrate principles of sustainability into livestock management practices. Students will identify strengths and weaknesses of traditional methods of farm animal management and compare those with sustainable methods, and seek ways to integrate these in real world applications. Students will examine links between livestock management and consumer supply chains while considering best practices that prioritize animal welfare, sustainability, and economic success.
Credits: 3

ANIM 415 Horse Facility Management

In this course, students will study important aspects of running an equine establishment, including barn hygiene, air quality, safety audits, and fencing and pasture maintenance and improvement. Students will learn the importance of properly managing the natural environment and built facilities to optimize the health of horses, including concepts related to natural ecosystems, ecosystem services, and beneficial management practices. The relationship between the health and well-being of the environment and the health and well-being of the horse will be explored.
Credits: 3

ARTS COURSES

ARTS 101 Composing the Landscape: Introduction to Landscape Photography

This course is an exploration of landscape photography. Students will examine its history, study its masters and work on developing their own visions. Over the span of the semester, students will gain an understanding of the medium while trying their own eye at creative expression. The first 2 weeks will re-fresh students on the basic camera functions and making good exposures as well as a "get to know you" assignment. The bulk of the semester will be spent learning the variations of landscape photography by both studying significant photographers and their work as well as exploring the variations with their own cameras, culminating in a portfolio project.
Credits: 3
Prerequisites: None

ARTS 103 Introduction to Songwriting

Songwriters use language that moves us to action, marks our place in history, and expresses our individual and collective stories. In this course, students will learn how to craft, refine, and present their own songs--music and lyrics. Successful students will develop critical listening skills, gain proficiency as editors, and immerse themselves into self-designed creative practices. Development of a writer's voice, understanding sense of place, various narrative styles, and traditional song structures will also be explored. Budding to intermediate songwriters will experiment with leveraging their

newly minted skills for cultural, environmental, political, or personal impacts.
Credits: 3
Prerequisites: None

ARTS 105 Environmental Storytelling for Social Change

Humans make sense of the world, and choose how to act within it, through the medium of storytelling. American pragmatist and philosopher Kenneth Burke argues that stories shape our thoughts and reality. More specifically, for this class, they are our most ancient and advanced tools for changing minds. Thus social change cannot happen without storytelling. In this class, students will learn how to construct the stories that drive and guide environmental intervention. Students will also learn practical strategies for engaging in the struggle over narrative, and how to deal with the increasing agency of individuals to decide which stories are worth listening to. Great stories demand an audience; great stories about our world, and its problems, demand action. Storytelling organizes and mobilizes people, spurs donations, and shapes public opinion. Nonprofits, foundations, and socially responsible businesses are looking for people who know how to leverage effective stories to drive action and energize supporters. This class will teach students how to tell those kinds of stories about environmental issues, and become changemakers in their profession.
Credits: 3
Prerequisites: None

BIOLOGY COURSES

BIOL 103 Biology: Foundations of Life

Introduction to fundamental biological principles emphasizing common attributes of all living organisms. Unifying concepts include chemical structure of living matter, structure and function of the eukaryotic cell, including characteristics of plant and animal cells, respiration, photosynthetic pathways, genetics, and microevolution.
Credits: 3
Prerequisites: None

BIOL 104 Biology: Foundations of Life Laboratory

This course includes the laboratory experiences focused on basic biology to accompany BIOL 103.
Credits: 1
Prerequisites: None

BIOL 105 Biological Diversity, Ecology, and Evolution

An introduction to biological diversity, macroevolution, population genetics, and organismal structure and function. Students will examine such topics as: Origin of life, mechanisms of evolution, diversity, animal and plant morphology, reproduction, behavior, population biology and ecology.
Credits: 3
Prerequisites: None

BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory

This course includes the laboratory experiences focused on biological diversity, ecology, and evolution to accompany BIOL 105.
Credits: 1
Prerequisites: None

BIOL 201 Organisms that Sustain the Earth: Understanding Plants

Plants, as the most prominent primary producers in terrestrial systems due to photosynthesis, are the base source of energy in the most ecosystems. This course will introduce students to the factors that influence the growth, distribution and abundance of plants, the influence of plants on energy and nutrient flow, and key features of plant biology. Students will experience the diversity of plants and how major taxa differ in form and function. Case studies will illustrate the role of plants in ecosystem function, human culture, and animal ecology.
Credits: 3
Prerequisites: None

BIOL 203 Ecological Principles: Applications to Conservation and Wildlife

In this course students will explore key concepts of ecology. The course emphasizes concepts applicable to understanding and mitigating impacts of climate change, human activities, and invasive species on ecological systems, as well as other concepts underlying conservation ecology and management of wildlife species. Through course activities focused around practical application of concepts, students will gain a basic understanding of evolution, autecology, population ecology, community ecology, and ecosystem ecology.
Credits: 3
Prerequisites: BIOL 105 and MATH 201

BIOL 301 Animal Behavior: The Evolution, Ecology, and Social Behavior of Animals

In this course, students will explore principles of animal behavior. They will discuss how evolution, environment, and life experience interact to influence the behavior of animals. Students will be introduced to the history of animal behavior as a scientific discipline, learn how to define behavior, and apply behavioral principles to measure and analyze behavior. The course will also cover topics related to social behavior including group living and animal communication as well as reproduction, mating, and parental care. Finally, students will explore other important survival behaviors such as predator avoidance, foraging, and predation. Skills learned in this class can be applied in both captive and wildlife animal fields to increase the wellbeing of a wide variety of animal species.
Credits: 3
Prerequisites: BIOL 103 or BIOL 105

BIOL 305 Conservation Biology

There's a popular axiom in science that "all biology is now conservation biology." This statement is telling in two ways: First, in the modern era it is hard to find a biological system that is untouched by humankind. Second, perhaps more than any other discipline conservation biology is highly integrative, bringing together such disparate fields as ecology, evolutionary biology, public policy, and sociology. In this course, we will lay the foundation for any field within the natural sciences or environmental studies. Specific topics that we will cover include the status of biodiversity, the threats facing biodiversity, the importance of ecosystem services, conservation policy, design and management of protected areas, and habitat restoration.
Credits: 3
Prerequisites: BIOL 103 or BIOL 105

BIOL 310 Microbiology

This course focuses on the diversity of microorganisms found throughout the earth, with a particular focus on their taxonomy, ecology, and evolutionary relationships. Not only the source for many of the serious animal diseases, microorganisms serve many ecological roles in nature. Fundamental topics exploring these roles and the impact of microorganisms on animal health and welfare will be nutrient cycling, genetic diversity, food production, and biotechnological applications. Students will additionally be exposed to the variety of processes and techniques related to assessing microbial communities and their diversity.
Credits: 3
Prerequisites: BIOL 103 and CHEM 101

BIOL 315 Cell Biology

This course is an in-depth exploration into the biology of cells of higher organisms. As the fundamental unit of life, cells play an integral role into the functioning of tissues, organs, and ultimately organisms. The topics in this course will be underpinned by an understanding of cellular structure and functioning, with particular emphasis placed on membrane and organelle formation, growth and transformation, transport and communication, and ultimately reproduction, with a brief exploration into the dysfunction and treatment of cellular abnormalities and cancers. Students in this course will additionally become familiar with the methods used for the observation and assessment of cells in laboratories.
Credits: 3
Prerequisites: BIOL 103 and CHEM 101

CHEMISTRY COURSES

CHEM 101 Chemistry I

This course covers the fundamentals of chemistry, with an emphasis on modern and applied chemistry of atomic and molecular matter. Specific emphasis will be on atomic theory, bonding, nomenclature, stoichiometry, molecular structure and reactivity,

orbitals and electron configurations, the periodic table, intermolecular forces, aqueous solutions, and basic chemical reactions.
Credits: 3
Prerequisites: None

CHEM 102 Chemistry I Laboratory

This course includes the laboratory experiences focused on basic inorganic chemistry to accompany CHEM 101
Credits: 1
Prerequisites: CHEM 101 (or concurrent enrollment)

CHEM 103 Chemistry II

This course is an introduction to chemical balance, equilibrium, and change. Topics covered include general equilibrium, acid-base chemistry, colligative properties, chemical kinetics, and thermodynamics, including entropy and enthalpy. Additional work will focus on gasses, gas properties, and electrochemistry, and build from topics covered in CHEM 101.
Credits: 3
Prerequisites: CHEM 101

CHEM 104 Chemistry II Laboratory

This course includes the laboratory experiences focused on chemistry to accompany CHEM 103.
Credits: 1
Prerequisites: CHEM 103 (or concurrent enrollment)

CHEM 201 Organic Chemistry 1

This course focuses on the chemistry of organic molecules. Starting with an overview of the diversity of carbon compounds, topics include organic molecular reactions, shapes and structures of molecules, and the spectroscopic identification of organic molecules. Additional work will examine the processes involved in synthesizing molecules, techniques used in determining molecular structure, and the application of organic chemistry to environmental issues.
Credits: 3
Prerequisites: CHEM 101 and CHEM 103

CHEM 202 Organic Chemistry 1 Laboratory

Throughout this course, students will become acquainted with multiple veterinary medical concepts, medical terms and scientific principles. Using an approach based on word derivation and combination, students will learn the names and etymology of various animal ailments and diseases, tests used in the analyses of diseases, as well as the treatments and therapeutic techniques used in alleviation and cure of animal health issues. This course will provide students interested in the veterinary medical fields a ground-up and comprehensive understanding of the complex language of veterinary terminology to be productive in a variety of current or future work environments and help understand more advanced veterinary fields.

Credits: 1
Prerequisites: CHEM 104 and CHEM 201 (CHEM 201 can be taken concurrently)

CHEM 203 Organic Chemistry 2

This course is a continuation of the concepts covered in CHEM 201, with a particular emphasis on reaction chemistry and the mechanisms of reactions. Specific topics will include use of NMR spectroscopy, mass spectrometry, electronic structure, and bonding in carbonyl compounds. Additional work will be focused on determining the patters of reactivity in conjugated and aromatic molecules, carbonyl compounds, and biologically important molecules such as carbohydrates and amino acids.
Credits: 3
Prerequisites: CHEM 201

CHEM 204 Organic Chemistry 2 Laboratory

This course includes the laboratory experience focused on organic chemistry to accompany CHEM 203.
Credits: 1
Prerequisites: CHEM 202 and CHEM 203 (CHEM 203 can be taken concurrently)

CHEM 301 Biochemistry

This course is an exploration into the link between biology and chemistry and provides an in-depth analysis of the structure and function of biomolecules, including their metabolism and regulation. Topics in areas such as bioenergetics and enzymology will provide the basis to understand major challenges to facing biological systems and organisms, including their pathologies, nutrition, and toxicology. Additional work will focus on using an understanding of biological molecules and their associated processes to analyze an environmental issue facing organisms.
Credits: 3
Prerequisites: BIOL 103 and CHEM 103

CHEM 302 Biochemistry Laboratory

This course includes the laboratory experience focused on biomolecular functioning, metabolism, and regulation meant to accompany CHEM 301.
Credits: 1
Prerequisites: CHEM 301 or concurrent enrollment

COMMUNICATION COURSES

COMM 101 Writing for Environmental Professionals

Environmental professionals understand that the ability to communicate effectively in many genres leads to professional success. In this writing course, students will refine and reflect on their writing process, practice writing in multiple genres, and learn about rhetoric. Through eight modules, online discussion, and a series of writing assignments, this course examines the most important aspects of any piece of professional writing:

organization, use of evidence, clarity and cohesion, and incorporating feedback during the revision process. Upon completion, students will develop strategies to improve their writing so that they become more persuasive and impactful environmental professionals.
Credits: 3
Prerequisites: None

COMM 201 Multimedia Communication for Environmental Professionals

In COMM 201 Multimedia Communication for Environmental Professionals, students produce collaborative and individual projects that develop critical reading, writing, thinking, and research skills. By applying a rhetorical framework to pressing environmental issues, students will develop effective, ethical communication in print and digital texts. Projects include oral, written, and visual presentations.
Credits: 3
Prerequisites: None

COMM 203 Environmental Communication

From Ecological Activists to Ecomodernists—how humans think, talk about, and represent nature has had an impact on policymaking, natural resource management, and the place that nature has in our day-to-day lives. This course explores how people communicate about the environment and how such rhetoric is used by advertisers, policy-makers, and opinion leaders. We will also cover how citizens can join (or resist) the effort to manage public opinion about the environment. Topics include environmental rhetoric, media and journalism, public participation in environmental decision making, social marketing and advocacy, and nature in popular culture and green marketing.
Credits: 3
Prerequisites: None

COMM 303 Communicating to Stakeholders

This course teaches students how to communicate real-world issues and problems for a just end. Students will learn how different modes of communication such as storytelling can be used as an effective way to communicate an organization's mission and builds empathy for its cause. Students will learn how to craft values-based communications to persuade stakeholders to support social justice issues such as sustainability, environmental law, and wildlife conservation. Students will learn concepts and skills to build public support for their organization's mission, strategic initiatives, and fund-raising activities. This course will develop skills in written, visual, and oral communication.
Credits: 3
Prerequisites: COMM 101 or COMM 201

COMM 401 Using Social Media in a Global World

Not only do marketers use social media to communicate with their customers but also as a way to better understand their customers. This course teaches students how to

use social media as a global branding and marketing tool, exposes learners to the analytic methods that can be used to convert social media data to marketing insights, and shows learners how social media data can be used to provide insights into market structure and consumers' perceptions of the brand.
Credits: 3
Prerequisites: None

COMM 403 Environmental Crisis Communication

This course introduces students to the key elements of crisis communication, including creating a plan before, during, and after a crisis. Since an organization's reputation is one of its most valuable assets, effective crisis management helps preserve and defend the company's reputation and maintain the organization's operations. This course explores aspects of crisis communications including typology of crises; history of crisis communications; theoretical basis for effective crisis response and communications; and crisis communications planning methodologies and strategies.
Credits: 3
Prerequisites: None

COMPUTER SCIENCE COURSES

CIST 101 Introduction to Coding for Environmental Applications

This course introduces students to the different types of programming languages used for geospatial customization. Students learn the basics of computing language and learn when and how they are applied. The course will provide background about the different coding environments highlighting the process of object-oriented programming and its relationship to critical thinking statements involved in conditional operators, loops, and functions.
Course meets language requirement unless otherwise noted.
Credits: 3
Prerequisites: None

CIST 103 Introduction to R

In this course students learn the basics of programming in R, a powerful and commonly used object-oriented programming language for modeling, statistical analysis, and graphic presentation in the ecological sciences. The course covers the basics of using R for data input and import, data subsetting and transformation, data analysis using common statistical approaches, and data visualization. In addition, students will learn to access and use R packages and write their own R functions. Students will learn these aspects of R coding by working through ecological case studies both in practice problems to develop a basic understanding, and then through developing their own code by working through a similar example.
Credits: 1
Prerequisites: None

ECONOMICS COURSES

ECON 101 Fundamentals of Economics

Environmental professionals need a basic understanding of micro and macroeconomics. This course will introduce students to the fundamentals of economic analysis and reasoning. Topics might include demand, supply, pricing, and output under different market structures, the principles of governing the level of national income and employment, the commercial banking system, monetary and fiscal policy, the international economy, and alternative economic systems. This course prepares students for taking more specialized economics courses.
Credits: 3
Prerequisites: None

ECON 301 Microeconomics for Ecological Sustainability

This course applies the principles of microeconomics to ecological and environmental sustainability issues. Students will consider the operation of a market economy and how best to allocate resources, will read case studies that explore how individuals and firms make decisions about production and consumption, and will explore how these decisions impact sustainability. Students will study the laws of supply and demand, explore the various causes of market failure, and examine how economic policies could be designed to correct market failure to maximize ecological sustainability.
Credits: 3
Prerequisites: 100-level MATH course or higher

ECON 303 Macroeconomics for a Sustainable Planet

In this course, students will explore the fundamentals of economics on a national and global scale. Specifically, students will learn how production, distribution and consumption of goods and services, the exchange process, the role of government, the national income and its distribution, GDP, inflation, trade, and unemployment can be used to design a more sustainable planet.
Credits: 3
Prerequisites: None

ENVIRONMENTAL EMERGENCY MANAGEMENT AND LAW ENFORCEMENT COURSES

EMGT 203 Social Justice Issues in Emergency Management

The primary goal of social justice in emergency management is to ensure all groups have the opportunity to receive resources equitably. This course explores how issues like terrorism become racialized and explores an overview of inequity in how agencies and people respond to natural disasters.

Credits: 3
Prerequisites: None

EMGT 301 Public Policy and Planning for Emergency Management and Law Enforcement

This course focuses on the role of local, state, and federal government in a time of disaster. Students will study key legislation related to disasters, disaster management, law enforcement, and how that legislation has impacted the profession.
Credits: 3
Prerequisites: None

EMGT 305 Planning and Responding to Natural Disasters

In this course, students will review and critique disaster plans and learn components of effective disaster management across jurisdictions.
Credits: 3
Prerequisites: None

EMGT 307 Planning and Responding to Cyberthreats and Terrorism

Students learn the history, methods, and philosophy of terrorism, with an emphasis placed on how governments and law enforcement agencies plan and respond to terrorism and cyberthreats. Students study case studies that explore terrorist activities and the implications for emergency response.
Credits: 3
Prerequisites: None

EMGT 403 Implementation of Emergency Management: Simulation and Exercises

The goal of this course is to prepare students to create and implement their own emergency management simulation. By the end of the course, students will be able to describe the benefits of exercise management; define the parameters and process of the simulation; describe the different phases of exercise management such as planning, conduct, post-review; and explain how to select the appropriate exercise.
Credits: 3
Prerequisite: None

ENVIRONMENTAL CRIMINAL JUSTICE COURSES

ENCJ 201 Law Enforcement and Emergency Management in the Age of Globalization

This course introduces students to the United States criminal justice system in the age of globalization. Students will develop a general understanding of the criminal justice system's response to crime and how the processes of globalization are changing it. It is an introductory overview of local, state, and federal law enforcement, judicial and

corrections agencies, and the criminal justice system processes. Special attention will be paid to the role criminal justice agents play in environmental issues and problems. The course prepares students to take more advanced courses that address the specific components of environmental criminal justice.
Credits: 3
Prerequisites: None

ENCJ 205 Drug Recognition Training

This course will study current drug trends in society exposing students to both use and abuse. We will identify drugs and the observable effects on the human body when abused. The students will become familiar with the signs and symptoms of abuse and be able to differentiate drug impairment with common medical conditions. We will explore the hazards of drug abuse in the working environments that the students are pursuing and identify potential skills to deal with those individuals.
Credits: 3
Prerequisites: None

ENCJ 301 Crime Scene and Forensic Techniques

In this course, students will learn the techniques used in the criminal investigations, introducing students to theories and fundamental knowledge of the investigative process, including special and basic forensic techniques. The course will include some of the following topics: crime scene and incident processing, information gathering techniques, the collection and preservation of evidence, how to write appropriate reports, and other related techniques and topics. Students will then apply what they learn to case studies that involve environmental laws and policies.
Credits: 3
Prerequisites: None

ENCJ 303 Homeland Security and Emergency Management

In this course, students will learn critical concepts to emergency and disaster management, risk prevention and management, counterterrorism, and consequence management and mitigation. This class will also explore the history and evolution of the Department of Homeland Security. Topics will include crisis action planning, including the impact of global warming; relationships among local, state, and federal agencies during management operations; concepts of emergency management, including mitigation, hazard analysis, and terrorism; and homeland security functions, methodologies, and techniques.
Credits: 3
Prerequisites: None

ENCJ 305 Natural Resource Law and Policy

This survey course addresses not only the creation and management of our natural and wildlife resources on federal public lands, with a focus on the National Parks, National Forests, and the National Resource Lands (Bureau of Land Management (BLM) regulated lands), but also including the National Wildlife Refuge System and the National Wilderness Preservation System. Students will learn how interest groups,

citizens, and the courts influence the management of natural resources on these lands. After taking the class, students should be familiar with the major public land legislation such as the National Forest and National Park "Organic Acts" and the Wilderness Act; as well as laws that affect our public lands, but apply more broadly, including the Endangered Species Act and the National Environmental Policy Act. Through class work and their papers, students will also be familiar with different perspectives on some of the most important current issues facing our public lands.
Credits: 3
Prerequisites: None

ENCJ 401 Environmental Compliance, Regulation, and Mitigation

Organizations that produce, import, process, handle, or release chemical substances are required by Federal law to comply with many regulatory programs that are implemented by the EPA. This course introduces students to the Federal laws and regulations that apply to environmental compliance and regulation. Upon completion of this course, students develop an understanding of the regulatory process, how specific materials and activities are regulated, and develop skills necessary for applying EPA's standards to operations.
Credits: 3
Prerequisites: None

ENCJ 403 Administrative Structure and Criminal Justice

In this course, students learn about the organization, management, and administration of local, state, federal criminal justice agencies with an emphasis on how the structure and functions of these agencies affect the administration of justice.
Credits: 3
Prerequisites: None

ENCJ 405 Environmental Criminology

This course explores environmental criminology and law by examining the strengths and weaknesses of federal and state laws that apply to water, air, land, and biodiversity. Specifically, the course explores specific issues that pertain to the nature and responses to environmental law, including crimes against nature, transgressions against humans, environments, and nonhuman animals. Students will also learn broad conceptual knowledge about law enforcement and regulation relevant for a criminological approach to environmental issues.
Credits: 3
Prerequisites: None

ENVIRONMENTAL HEALTH AND SAFETY COURSES

EVHS 205 Occupational Safety and Health

In this course, students examine occupational safety and health practices needed to address occupational safety and health issues in the workplace. Students will employ

regulatory standards as a guide to apply policies, procedures, standards and occupational safety and health principles. Topics will include industry recognized best practices, origin of the standards, the process and rules of inspections, citations and penalties, and policies.
Credits: 3
Prerequisite: BIOL 103, BIOL 104, CHEM 101, CHEM 102

EVHS 210 Fire Protection and Safety

This course introduces students to the fundamentals and theories of how fires start, spread, and are controlled. Students will learn about basic fire chemistry principles such as properties of solids, liquids, and gases, and fire combustion and behavior. Finally, students will learn about the laws applied to fire prevention, including federal fire safety requirements for industry and commerce, solving technical problems encountered, recognition of hazards, prevention of fires and inspection techniques.
Credits: 3
Prerequisite: CHEM 101, CHEM 102

EVHS 305 Construction Safety

Construction workers are some of the most at risk workers in any industry. That is why it is important to understand the foundations of accident prevention in the building and construction industry. This class introduces students practical applications of safety analysis and management. Students will learn about past incidents through case studies and explore topics such as reporting unwanted occurrences, incident databases, safety performance indicators, and accident investigation. Students then will learn about how to prevent accidents for future conditions, learning risk analysis, preliminary hazard analysis, and job safety analysis. This course will emphasize using data and data analysis to make decisions.
Credits: 3
Prerequisites: EVHS 205, MATH 201

EVHS 405 Corporate, Non-profit, and Government EHS Management

In this course, students will profile Environmental Health and Safety (EHS) management at an organization. Students will explore the EHS management's history, motivations, and strategies. The course will introduce students to developing systems of managing an organization's Environmental Health and Safety. Students will also investigate the implications of developing an EHS strategic plan and policies and learn how to communicate that plan and policies to a variety of stakeholders.
Credits: 3

EVHS 410 Sustainable Product Stewardship

In this course, students will learn about sustainable product development and product stewardship. This course will explore key concepts through experiential online activities which will assist learners with integrating sustainability, life cycle thinking (cradle to grave), and sustainable product development and design tools into new product development processes.
Credits: 3

ENVIRONMENTAL HEALTH AND WELLNESS COURSES

EVHW 105 Introduction to Human Health

This class is designed to give students interested in health careers basic knowledge related to health professions. Students will learn foundational concepts in anatomy and physiology, medical terminology, medical ethics, and medical communications.
Credits: 3
Prerequisite: BIOL 103 and BIOL 104

EVHW 205 Health Literacy for Managers

This course provides health professional leaders with the tools to transform health and wellness delivery at the workplace. Students will learn about ways to improve workplace happiness through health care literacy and wellness quality for employees.
Credits: 3
Prerequisite: BIOL 103 and BIOL 104

EVHW 305 Employee Benefits for Wellness

This course focuses on policy and politics about America's healthcare's system, closely examining access, cost and quality. Students will learn about the roles of patients, physicians, hospitals, insurers, and pharmaceutical companies. The interaction between the government and these different groups will also be covered. The course will cover national health care policy initiatives. The course will develop students' critical and analytical skills about the U.S. healthcare system and the people affected by it.
Credits: 3

EVHW 310 Mind, Body, Soul, Planet: Understanding the Mind-Body Connection for Long-Term Health

This course will help students understand what contributes to emotional, physical and spiritual well-being through awareness of the mind-body connection. Students will study the mind-body connection, the stress response, brain training techniques, plus the

important roles of nature and positive psychology to understand whole-body health. Students will explore different techniques that support whole body health such as yoga, reiki, and meditation, along with understanding the role of diet, nature, exercise, relationships, and stress play.
Credits: 3

EVHW 405 Health Coaching: How to Live a Balanced Life

This course provides an overview of the field of health coaching and is designed to develop a skill set for health coaching including: creating relationships, envisioning change, motivational interviewing, planning and goal setting, providing feedback, progression and engagement strategies.
Credits: 3
Prerequisite: PSYC 101

EVHW 410 Worksite Health Environment and Management

In this course, students analyze the principles of developing a successful worksite wellness program. This course introduces key concepts, strategies, resources, and tools. Students will learn about worksite wellness, collaborating with management and other stakeholders, creating wellness teams, collecting data, developing a strategic plan, creating incentives, creating budgets, understanding legal issues, and creating supportive environments.
Credits: 3
Prerequisite: PSYC 101

ENVIRONMENTAL JUSTICE AND SOCIAL CHANGE COURSES

ENVJ 201 Understanding Diversity and the Environment

In this course, students develop a critical vocabulary around issues of diversity, sustainability, and the environment. Students learn about the ways people from different backgrounds, whether racial, age, gender, socioeconomic, are treated and affected differently by environmental problems. Finally, students develop ideas about how to make real-world environmental changes that include every stakeholder's voice, especially voices from communities that have otherwise been subordinated, silenced, and marginalized.
Credits: 3
Prerequisites: None

ENVJ 203 History of Creating Environmental Social Change

Although environmental issues are often presented ahistorically, every issue is historically rooted to economic, political, social, and cultural reasons. This course

explores the role that historically-rooted lines of power such as race, gender, and class produce patterns of local and global environmental resource use and abuse. Students learn these histories by studying key environmental figures who have fought for environmental justice and social change. Finally, students recognize that history provides a meaningful and important framework for understanding the present and can be used to provide solutions to some of the most pressing environmental justice issues.
Credits: 3
Prerequisites: None

ENVJ 301 Energy Justice: Local to Global Perspectives

As global patterns of energy use often remain hidden or go undiscussed, it is important to investigate the social and environmental justice implications. In this class, students examine case studies to explore real-world controversies over energy extraction and use. Some questions this course considers are who benefits most from current energy systems? Who pays for it? How does climate change policies affect global energy patterns and use? How do political and economic power drive the conversation and energy policies around the world? In addition to exploring the existing problems, students will consider possibilities for creating more just and sustainable energy systems.
Credits: 3
Prerequisites: None

ENVJ 303 American Government: Foundations in Environmental Law

Passing legislation and enforcing the law are some of the most powerful tools to enact environmental justice and social change. This class provides an overview of the law and legal system, with an emphasis on environmental cases. After covering the basics of American government and the legal system, students focus their learning on the design, implementation, and enforcement of major environmental statutes.
Credits: 3
Prerequisites: None

ENVJ 305 Sustainable Design and Justice

The planning of resilient, sustainable, and socially just urban spaces has become extremely important as more and more of the world population urbanizes. This course teaches students how to use design thinking to work with different stakeholders such as architects, designers, city planners, government, and the local community to ensure that urban planning projects consider and implement social and environmental justice initiatives.
Credits: 3
Prerequisites: None

ENVJ 307 Food Systems and Social Justice

This course explores the social and environmental dimensions of food systems from a

global perspective. Through an exploration of the relationships between the natural and built environment, students explore the environmental impacts of food production, food processing, food distribution, and food disposal. Lastly, students learn how power and justice are distributed among the farmers, big agro-business, food industry workers, business owners, policymakers, communities, and consumers.
Credits: 3
Prerequisites: None

ENVJ 401 Seminar in Environmental Justice: Balancing Equity, Environment, and Enterprise

This course advances students' environmental justice professional skills so that they can find real-world solutions to make sure that the people are treated fairly and have meaningful involvement in the development, implementation, and enforcement of environmental laws, regulations, and policy. Students start to develop their final capstone project that provides a solution to a real-world environmental justice problem and that addresses a key tenant of Environmental Justice: the recognition that environmental goods (such as clean air and water) and environmental harms (such as toxic waste) are not always distributed equitably among populations. Since environmental harms fall more heavily on low-income communities, communities of color, immigrant communities, indigenous peoples, and other population demographics, students examine the various reasons for these disparate impacts and will start to offer possible solutions grounded in law, policy, and practice.
Credits: 3
Prerequisites: ENVJ 201 and ENVJ 303

ENVIRONMENTAL PROFESSIONAL CORE COURSES

EVPC 101 Professional Skills

In this course, students will develop professional and academic skills that are applicable in a variety of environmental fields. Through activities focused on reflection, self-assessment, and application, students will acquire techniques and strategies to be a successful learner and a professional. Course activities also include developing research skills, professional communication, critical writing, positive psychology, and media creation. This course serves as the gateway to the other environmental professions core courses.
Credits: 3
Prerequisites: None

EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation

This course is part of a two-course sequence that provides students with an understanding of the interconnectedness of the looming environmental issues that the world faces. This class will provide students with a basic scientific understanding of

deforestation, biodiversity, and overpopulation and address what societies can do that they aren't currently doing. Upon completion, students will be able to critically assess these issues and provide models for making more sustainable choices.
Credits: 3
Prerequisites: None

EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste

This course is part of a two-course sequence that provides students with an understanding of the interconnectedness of looming environmental issues that the world faces. This class will provide students with a basic scientific understanding of energy, water scarcity, and waste, and address what societies can do that they aren't currently doing. Upon completion, students will be able to critically assess these issues and provide models for making more sustainable choices.
Credits: 3
Prerequisites: None

EVPC 301 Environmental Justice

This course examines issues of environmental quality and social justice. The course begins by examining the philosophical foundations and history of the environmental justice movement and foundational concepts such as justice, race, gender, and class. Students will explore these concepts through a series of case studies of urban and rural environmental (in)justice in the United States and move on to environmental justice's role on globalization.
Credits: 3
Prerequisites: None

EVPC 305 Building a Better World: Ethical Decision-Making

Ethical decision making is essential for leadership, and since most decisions leaders make have an ethical dimension, the ability to discern the ethical implications requires a set of skills that are informed by ethical philosophy. This course provides students with strategies, tools, and techniques to make ethical decisions by considering the ethical issue and the people involved, develop a strategy, and implement ethical action possible. Through the use of case studies, students will develop their ethical awareness, learn to distinguish difficult decisions from real ethical dilemmas, and practice deliberating effectively about a variety of ethical issues drawn from social and professional contexts.
Credits: 3
Prerequisites: None

EVPC 401 Transformational Leadership

In this course, students explore strategies needed to become effective instruments of change. Students will examine themselves as leaders, learn how to create meaningful relationships as a leader, and understand the role of leadership within complex systems. By using case studies from a variety of organizational contexts such as business, government, non-profit, community, and education, students explore concepts of organizational behavior and culture, consensus building, and project

management to lead effective change towards environmental sustainability. This course is designed to empower and prepare students to become leaders in any profession.
Credits: 3
Prerequisites: None

EVPC 490 Transdisciplinary Capstone

The Capstone course is the culminating course for students in Unity College bachelor's degrees. In this course, students will develop a project that deals with a real issue and produce a final artifact reporting the project's findings. During this process, students will demonstrate and apply learning from their degree program and their ability to communicate to a broad audience. The course will also cover other important topics that support a student's career development and goals. All projects will be workforce-related products that students can use for their current or pitch to a future employer.
Credits: 3
Prerequisites: Minimum of 90 credits completed

ENVIRONMENTAL SCIENCE COURSES

ESCI 101 Geology and Our Environment

Desertification, acid rain, atmospheric carbon dioxide levels, radon poisoning – what do these have to do with geology? In this course students will explore how the geology of our environment influences ecological processes and environmental issues. Students focus on the influence of geological processes, exploring both the large-scale events of natural disaster such as earthquakes, volcanoes, floods, and landslides, and less obvious influences of geology on pollution, soil loss, groundwater availability, distribution and effect of mining and petroleum exploration, and other environmental issues. Issues will be explored through case studies with an emphasis on recognizing the role of geological process in solving or creating environmental issues.
Credits: 3
Prerequisites: None

ESCI 301 Soil Analysis

This course involves detailed study of the biological, chemical, and geological components of soil, soil types, and soil health. Topics covered include principles and processes in soil chemistry, soil taxonomy, soil geography, and erosion. Additionally, students will explore the role of organic materials in soil health and type, general roles of soil properties on vegetative nutrient uptake, and the role of soil on nutrient and chemical cycles. Throughout the course of the term, students will pursue a project related to soil's influence on environmental health and sustainability.
Credits: 3
Prerequisites: None

ESCI 303 Hydrology, Wetlands, and Water Policy

This course is a systematic study of the function of wetlands, including the underlying hydrology and policies controlling their use. Specific topics include water pathway models, reservoirs, groundwater storage and utilization, general wetland ecology, and wetland policy and regulation. Students will additionally explore human impacts on hydrology and wetlands, and work in groups to prepare a wetland restoration plan.
Credits: 3
Prerequisites: None

ESCI 305 Environmental Remediation and Toxicology

This course is focused on the basic concepts of and science behind environmental toxicology, including processes related to remediation and contaminant mediation. Topics include the underlying biological processes such as bacterial metabolism, enzymatic activity, anaerobic and aerobic biodegradation, and an overview of remediation of inorganic contaminants. Students will additionally explore the fate and effects of chemicals in organisms in the environment, including air, water, and ground pollutants.
Credits: 3
Prerequisites: None

ESCI 401 Environmental Science Field Techniques Laboratory

In this course, students learn and apply various field and laboratory techniques used in environmental science. Emphasis is placed on acquiring new skills and putting the skills to practice to improve abilities. Skills will be focused on those used in both field (*e.g.*, wetland delineation, aquatic macroinvertebrate sampling) and lab (*e.g.*, sediment analysis, water chemistry techniques, software applications for analysis) settings, and include reference to those used in various professional scenarios.
Credits: 1
Prerequisites: None

ENVIRONMENTAL STUDIES COURSES

ENVS 101 Sustainable Solutions to Globalization

This course is designed to enhance literacy skills needed to understand major environmental issues facing the world in the 21st century. This and other core courses at Unity are designed to address prominent issues during your education at Unity Online. These are issues that will affect your chosen career, your future lifestyle, and the lives of your family and future generations. What are the most pressing environmental issues of our time? What do we need to know to address them? The course tackles these questions from variety of disciplines to provide the bigger picture and put our environmental challenges in a global context.
Credits: 3
Prerequisites: None

ENVS 201 The Warming Planet: Understanding Climate Change

Climate change is one of the most urgent and complicated issues we face today. This course explores the science of climate change by teaching students how the climate system works; what factors cause climate to change; how climate has changed in the past; how scientists use models, observation, technology, and theory to make predictions about future climate; and the possible consequences of climate change for our planet. Finally, students will explore the connection between human activity and the current warming trend and consider some of the potential social, economic, political, and environmental consequences of climate change.
Credits: 3
Prerequisites: None

ENVS 205 Drone Technology and the Environment

Unmanned Aerial Systems (UAS), most commonly referred to as drones, have become an increasingly valuable tool for the Environmental Science field.

- How can the use of drones advance the ability to make informed decisions about our environment?
- What does it take to fly a drone safely and legally?
- What are the requirements to become a remote pilot?
- How will this exponentially growing industry fare in the future?

This course will investigate these questions and more. It will provide an opportunity to understand drone use in multiple Environmental Science disciplines and will position students well for studying for the FAA Remote Pilot Certification test should they be interested in taking it. Drone Technology and the Environment will also provide hands-on training in planning drone missions, developing policies and procedures, and flying recreational drones- with an emphasis on drone safety. This is a valuable skill set in a field that is growing exponentially both here in the United States and around the globe. This is an introductory drone course. No prerequisites or prior flight experience is needed. It is my intention to facilitate an inclusive, participatory learning community where each of us is a resource to the other. There will be a variety of activities and assessments to accommodate different learning styles, including reading and written assignments, quizzes, discussions and even a group project.
Credits: 3
Prerequisites: None

ENVS 303 Social Science for Environmental Professionals

Every environmental professional needs to understand how to interpret and use research data because they use data to procure stakeholder buy-in and inform the public about important environmental issues. In this course, students will learn an overview of social science research methodology and how to apply those concepts and tools to current environmental issues. Upon completion, students will gain skills in research, data analysis, data implementation, and communication.
Credits: 3
Prerequisites: MATH 201

ENVS 305 Advanced Drone Skills

Jumpstart your drone career with advanced marketable skills in an industry that is growing exponentially. Students will learn to use drones for monitoring, modeling, and mapping remotely sensed data, plus the requirements to fly drones in the National Airspace. After completion, students will be prepared to take the Remote Pilot exam.
Credits: 3
Prerequisites: ENVS 205 or completion of the free FAA Safety Course: Part 107 small Unmanned Aircraft Systems

FINANCE COURSES

FINC 301 Environmental Accounting

Environmental accounting is increasingly being used in business and government to support the development of sustainable global solutions and government policy. Students in this course will learn how environmental accounting can show how different sectors of the economy affect the environment and how environmental policy affects the economy. The course will cover what environmental accounting is and why is it useful to business, how can environmental accounting help decision-making, what are key policy questions in relation to accounting, and what are the practical considerations professionals need to address to make environmental accounting an enduring reality for business and governments around the world.
Credits: 3
Prerequisites: 100-level MATH course or higher

FINC 401 Financing a Sustainable World

Since business plays an important role in developing environmental financial solutions for future generations, this course considers how the tools of finance can address environmental challenges and how market processes can be used to ensure long-term sustainability. Students will learn an overview of business financial management, with an emphasis on financial statement analysis, management of cash flow, risk and return, and sources of finance. Upon completion, students will be able to interpret and apply principles of financial management to develop sustainable business solutions.
Credits: 3
Prerequisites: 100-level MATH course or higher

GEOSPATIAL TECHNOLOGY COURSES

GISC 101 Introduction to Geographic Information Systems (GIS)

In this course, students will explore key concepts used in Geospatial Technologies. Topics include the use of scale, coordinate systems, geodesy, direction, projections, traditional land surveying techniques, and global positioning systems (GPS). Students explore the fundamental knowledge and techniques used in geospatial technology careers. This course also introduces students to remote sensing, geographic information systems (GIS), and cartography to start identifying and quantifying environmental patterns. Students will critically evaluate information and use quantitative reasoning

skills such as patterns with urban heating in relationship to heat stress on a population. Students who finish this course are prepared to continue in GISC 201 Geographical Information Systems for a Changing World.
Credits: 3
Prerequisites: None

GISC 201 Geographic Information Systems for a Changing World

This course covers the theory and practice of geographic information systems (GIS) through applications of environmental science and ecology. Students use a variety of global environmental spatial data types for spatial analysis and data visualization to quantify environmental changes using quantitative datasets. Students learn essential GIS procedures for data viewing, acquisition, manipulation, geographic referencing, and map creation coupled with real-world datasets and meaningful results. Manipulation of common data types such as raster and vector datasets, database operations and applications are covered. Basic methods of GIS analysis are also included in the form of topological relations, buffer, query and map algebra analysis. The end product is the creation of data layouts, feature layers and dynamic and/or static maps allowing students to visualize spatial patterns of global changes.
Credits: 3
Prerequisites: GISC 101
Modality: Online or Hybrid

GISC 301 Integrated Spatial Analysis and GIS Application

This course covers GIS for investigating geographic patterns, relationships and connections. Spatial analysis methods are used for both raster and vector data. This course emphasizes problem-solving and decision-making using GIS. Students will explore the use of advanced ArcGIS Extensions through environmental spatial analysis and modeling of complex terrains, hydrological watersheds, detecting patterns and gaining statistical insights on environmental issues. This course teaches students how to use models and scripts for automating GIS processes also introduced and applied to process large environmental datasets to unlock spatial patterns.
Credits: 3
Prerequisites: CIST 101, GISC 101, GISC 201

GISC 303 Conservation Cartography and Visualization

This course covers fundamental concepts of cartography and visualization using geographic information systems (GIS) and illustration programs (Adobe Illustrator) as it is applied for conservation organizations and projects. Students employ design principles to create effective maps, incorporating data from a variety of formats used to communicate complicated environmental issues to a diverse map user audience. Hardcopy and web maps are produced to communicate conservation patterns and outcomes targeted for a diverse map audience. Infographic, animations, 3D maps, and other visualization techniques are explored to convey the importance of environmental conservation through the science and art of cartography
Credits: 3

Prerequisites: GISC 101, GISC 201

GISC 305 Environmental Impact Using Remote Sensing

This course covers remote sensing fundamentals as they apply to mapping of Earth's surface and understanding how the earth works. These approaches include Earth observation in varying forms such as from sensors on satellites, aircraft, drones and ships. Understanding the electromagnetic spectrum of radiant energy and the radiation emitted from Earth's surface provide a foundation for understanding of the types of imagery available and their characteristics. Image enhancement, classification and quantitative techniques are explored with attention to integration with GIS datasets. Application of remote sensing for land cover change, vegetation classification, and environmental quality are explored. Students will observe environmental changes over spatial and temporal periods through the qualitative and quantitative processing of remote sensing at a local, regional, and global scale.
Credits: 3
Prerequisites: GISC 101, GISC 201

GISC 307 Field Data Collection for GIS

In this course students learn best practices to design, configure and deploy ArcGIS software for field-productivity apps to meet their environmental data collection needs. Put your environmental data collection needs to the test and create a dynamic solution based on your non-profits, governmental agency or conservation data needs. This course covers the design and implementation of geographic databases for GIS data capture and management. Included are essential concepts and practices of relational database management systems, with specific application to GIS. Volunteered geographic information scenarios will be addressed and applied to final project.
Credits: 3
Prerequisites: GISC 101, GISC 201

GISC 401 Advanced GIS Analysis for Environmental Solutions

This course covers data accuracy and quality, and standard and advanced geospatial data models such as changes in glaciers, bird migration, urban heat islands and disappearing coastlines. Students will be exposed to the workflow of processing remote sensing image analysis using R. Students will also learn data integration and analysis, constraint analysis, location-allocation analysis, and metadata standards and documentation. Geospatial ethics and environmental industry applications of geospatial analysis will also be covered.
Credits: 3
Prerequisites: GISC 101, GISC 201, GISC 301

HEMP INDUSTRY AND SCIENCE COURSES

HEMP 201 Law, Society, and the Cannabis, Hemp, and CBD Industry

The 2014 and 2018 U.S. Farm Bills have progressively legalized hemp (*Cannabis sativa*) cultivation, generating tremendous interest in food, oil, and fiber products. In this course, students will gain a broad-based understanding of the industry from seed to sales and explore the legal and regulatory environment and challenges facing the cannabis, hemp, and cannabidiol (CBD) industry today and in the future. Discussions will focus on history, regional regulations, cultural implications, and research into the uses, products, and growth of the cannabis, hemp and CBD industry in the U.S. and abroad.
Credits: 3
Prerequisites: None

HEMP 203 The Science of Hemp and CBD Processing

The 2014 and 2018 U.S. Farm Bills have progressively legalized hemp (*Cannabis sativa*) cultivation, generating tremendous interest in food, oil, and fiber products. In this course, students will gain a broad-based understanding of the industry from seed to sales and explore the legal and regulatory environment and challenges facing the cannabis, hemp, and cannabidiol (CBD) industry today and in the future. Discussions will focus on history, regional regulations, cultural implications, and research into the uses, products, and growth of the cannabis, hemp and CBD industry in the U.S. and abroad.
Credits: 3
Prerequisites: None

HEMP 301 Hemp Products, Production Systems, and Distribution

Having been cultivated for over 10,000 years, cannabis is one of the oldest agricultural crops in history. These tall, hardy plants were grown by early humans for rope, seed, oil, and fabric. These plants were selectively bred for industrial purposes and have evolved into the type of cannabis we now know as hemp. Students will study the different products created from hemp, the technical requirements for oil extraction and processing, and distribution challenges and potential. Emphasis will be placed on understanding the costs, challenges, and benefits of each product and market niche, along with the development of socially sustainable hemp businesses. Students will create business plans that demonstrate an understanding of the science and technical needs for a variety of hemp-based products.
Credits: 3
Prerequisites: None

HUMANITIES COURSES

HUMN 101 Pop Culture and the Environment

What is the role of popular culture in society? Does it have the capacity to provoke social change? These are some of the questions students will consider in this class. Students will examine several pop culture artifacts from a global context to discuss how the works use a variety of strategies for understanding, making visible, and at

times influencing environmental social change. Finally, students will consider how these artifacts relate to nation, history, gender, class, and sexuality. Through discussions and multimedia activities, students will grapple with interesting and challenging questions and debates around the role popular art plays in influencing the public's opinion(s) about climate change and other sustainability issues.
Credits: 2
Prerequisites: None

HUMN 103 Environmental Documentary Films

Documentary films are a powerful way to inform the public about environmental issues. Because they represent real people, documentaries are a powerful rhetorical tool directors and producers use to provoke a deeper, empathic response. Although documentary films with themes of environmental activism date back to the silent film era, the 21st century has seen a spike in the number of quality films that engage the public in environmental issues. In this class, students will study the documentary film genre, analyze films, discuss the ethics of producing documentary films, and produce their own short documentary project.
Credits: 3
Prerequisites: None

HUMN 201 Global Conflicts, Reconciliations, and Transformations

This interdisciplinary humanities course explores conflicting cultural systems as expressed in global human culture through history, philosophy, and religion. Students will develop tools to successfully and humanely negotiate increased diversity from a variety of contexts such as economic exchanges, the refugee crisis, war, terrorism, and climate disruption. All of these contexts require an understanding of cultural differences, religion, language, and custom. Upon completion, students will begin to develop a historical awareness necessary to think through complex global interactions.
Credits: 3
Prerequisites: None

HUMN 203 Global Literature and Social Justice

What is the role of art in society? Does art have the capacity to provoke social change? These are only some of the questions students will consider in this class. Global Literature and Social Justice will explore several works of literature, film, and other media in a global context. With an emphasis placed on contemporary works, students will discuss how texts use a variety of strategies for understanding, making visible, and at times influencing social change. Students will consider how these texts relate to nation, history, gender, class, and sexuality. Students will grapple with interesting and challenging questions and debates.
Credits: 3
Prerequisites: None

LANGUAGE COURSES

SPAN 101 Introduction to Spanish

Introduction to Spanish will help the student acquire the fundamentals of pronunciation and grammar, practical vocabulary, useful phrases and the ability to understand, read, write and speak simple Spanish. Basic relevant information covered includes: geographical and historical background of the language. The class will prepare the student for further language study. The student will learn Spanish in the same manner s/he learned her/his first language:1. Listening to the language; 2. Repeating the new language; 3. Writing; 4. Reading; 5. Interactive participation.
Credits: 3
Prerequisites: None

SPAN 102 Introduction to Spanish II

Intermediate Spanish is a continuation of Introduction to Spanish by developing their proficiency in speaking, reading, writing, and listening. In Intermediate Spanish, all coursework will be taught entirely in Spanish because learning a language is more than vocabulary and grammar. Students will expand their ability to communicate in written and oral work, and expand their understanding of the rich, diverse Spanish-speaking cultures.
Credits: 3
Prerequisites: None

MANAGEMENT COURSES

MGMT 201 Understanding the Sustainable Business Landscape

This course introduces students to business with a focus on an organization's environmental and social impact. Students will learn about the basics in corporate social responsibility, supply-change management, finance, and non-financial reporting and accounting. Students will obtain knowledge about how small businesses and corporations integrate corporate social responsibility models in order to identify new markets and opportunities, communicate with their stakeholders, compete in a global marketplace, and address social and environmental sustainability expectations and requirements.
Credits: 3
Prerequisites: None

MGMT 301 Starting Your Small Non-Profit

The course covers the processes of starting a small business from ideation to implementation, with an emphasis on designing a sustainable business model, writing a business plan, learning forms of ownership, and exploring funding opportunities. Students learn how to meet high standards for social and environmental impacts for small businesses. Upon completion, students will be able to bring all the tools and lessons discussed to launch their own business.

Credits: 3
Prerequisites: None

MGMT 303 Strategic Management for Social Change

This course introduces students to strategic management through case analyses and provides students with the tools to consider the basic direction and goals of an organization, the environment (social, political, technological, economic, and global factors), industry and market structure, and organizational strengths and weaknesses. The course emphasizes the development and successful implementation of strategy in different types of organizations across industries. With a focus on non-profit, students will put themselves in the shoes of top management and make important, "Big Picture," decisions. Students will learn skills to analyze complex business situations and present findings both orally and in writing. Finally, students will learn how to develop strategies to promote social change and the sustainability movement.
Credits: 3
Prerequisites: None

MGMT 403 Global Supply Chain Operations: Greening Your Business

In this course, students will learn how to integrate global logistic, purchasing, operations and market channel strategies. The course covers the fundamentals and logistics of network management, consisting of network suppliers, manufacturers, warehouses, distribution centers, wholesalers, and retailers. This course develops the student's understanding of the design, control, and operation of supply chains through the lens of sustainability management.
Credits: 3
Prerequisites: None

MGMT 405 Using Data for Sustainable Business Decisions

This course introduces students of sustainability management to the data analysis techniques and statistical methods that are indispensable to sustainable business management. Students learn how to use statistical information in the context of evaluating environmental issues. Possible topics will include environmental monitoring, impact assessment, environmental valuation techniques and analyses of sustainable development.
Credits: 3
Prerequisites: MATH 201 Statistics for Environmental Professionals

MARINE BIOLOGY AND SUSTAINABLE AQUACULTURE COURSES

MBAQ 101 Scientific Diving

This course is meant to provide training and practice in conducting diving for research purposes. Scientific diving is critical to prepare divers to act as members of scientific

research teams where the underwater environment is explored. Students will learn to use proper equipment and techniques, understand the legal aspects and responsibilities related to scientific diving, and prepare them to be competent researchers in areas such as archaeology, biology, hydrology, and geology. Students will be introduced to and practice basic data collection, surveying, lifting of items to surface, organisms and artifacts, excavating, sampling, and organismal observation. All scientific diving training meets the standards of the American Academy of Underwater Sciences (AAUS). This course is typically scheduled in the Northern Hemisphere in Summer and Fall but may also be taught in tropical or Southern Hemisphere locations at different times.
Credits: 1
Prerequisites: Evidence of basic SCUBA diving certification from an internationally recognized training agency (e.g., NAUI, PADI, etc.)

MBAQ 103 Small Boat Handling, Operation, and Maintenance

This course is an on-the-water course which serves as an introduction to the safe operation and handling of small motorboats and skiffs and serves to improve learner's boating skills. No previous experience in boating is required, although students should be comfortable in, on, and around water prior to signing up for this course. Topics covered will include the principles and practices of operation of a variety of vessels, basic terminology, navigation, and handling. This hands-on course will additionally expose students to the rigging and working gear typically used in marine and aquatic resource development operations. Work done in this course is compliant with both the U.S. Coast Guard and the National Association of State Boating Law Administrators. This course is typically scheduled in the Northern Hemisphere in Summer and Fall but may also be taught in tropical or Southern Hemisphere locations at different times.
Credits: 1
Prerequisites: None

MBAQ 105 Introduction to Oceanography

This course provides an overview of oceanography – the chemical, biological, geological, and physical characteristics and patterns of oceans throughout the globe. Topics covered will include the physical characteristics and patterns of oceans throughout the globe. Topics covered will include the physical and chemical properties of seawater, evolution of ocean basins, ocean-atmosphere interactions and cycles, multi-dimensional ocean circulation, and large-scale fluctuations such as tides and waves. Additional work will include an investigation into patterns of sedimentation, plankton and primary productivity, and biogeochemical cycles. Specific emphasis will be placed on how ocean behavior and patterns is impacted by and impacts human development and coastal communities around the world.
Credits: 3
Prerequisites: None

MBAQ 201 Form and Function of Unique Marine Ecosystems

This course is an examination into the structure and dynamics of various saltwater

ecosystems and builds from basic ecological principles sustaining marine life. Issues covered include an exploration of habitats ranging from estuaries to the rocky intertidal zone and coral reefs to the open ocean. Major ecological communities will be studied, with a particular focus on those supported by kelp and plankton and include an exploration into unique marine environments such as the deep sea. Additional topics include trophic interactions, energy flow, and community and population organization in select marine habitats. Students will explore the ecological processes controlling the distribution and abundance of marine organisms and community structure and examine the impact of humans on the marine environment.
Credits: 3
Prerequisites: BIOL 203

MBAQ 202 Sea Turtle Rehabilitation

This course will introduce students to sea turtle biology, health and rehabilitation, with a special focus on the sea turtle's role in a 'One Ocean' model. The history of sea turtle rehabilitation, current and future directions will be discussed. Rehabilitative husbandry will be covered, including water quality and chemistry, and nutritional needs. Basic anatomy and physiology will be presented in an organ system format, with an introduction to veterinary techniques in these species as well as common pathologies and current treatments. Finally, specific topics will be covered, to include viruses, parasites, algae blooms, environmental contaminants, field techniques, oil spills, health assessments and fishery interactions, and the role of the rehabilitation in these environments.
Credits: 2
Prerequisites: BIOL 103 or BIOL 105

MBAQ 203 Global Diversity of Freshwater and Marine Resources Used in Sustainable Harvest

This course will provide an overview of the sustainably harvestable resources found in both aquatic and marine ecosystems. With an underpinning on the contemporary approaches toward habitat and population management, students will learn about capture and growth fisheries and aquaculture, emphasizing the contribution of these to the global food supply. Topics covered will include production methods, environmental and ecological impacts, best practice in growth, capture, and processing, and an overview of marketing of fisheries resources. Additional work will explore the impact of human populations on resource availability and health, as well as the major issues connecting resource extraction and acquisition to environmental degradation. All work will build from basic ecological concepts covered in other coursework and be placed in the context of effective long-term management practices.
Credits: 3
Prerequisites: BIOL 203

MBAQ 301 Sustainable Aquaculture Techniques 1: Growing Shellfish and Finfish

This course covers the theory and practice of aquaculture techniques used in growing shellfish and finfish in both freshwater and marine habitats. Topics covered will include species identification, habitat creation, reproduction, hatchery and nursery operation, and growth promotion. Additionally, students will learn how to manage the health of aquaculture organisms, harvesting principles and techniques, processing procedures, and identifying appropriate markets for sale. Discussions will be based on the biological, chemical, and economic aspects of aquaculture with a strong emphasis on sustainability, underscoring techniques which minimize environmental impact while maximizing human and animal welfare. Students will assess best-practices in the industry which meet sustainability goals.
Credits: 3
Prerequisites: MBAQ 203

MBAQ 303 Sustainable Aquaculture Techniques 2: Crustaceans and Pathobiology

This course covers the theory and practice of aquaculture techniques used in growing crustaceans and algae in both freshwater and marine habitats, as well as the mechanisms and causes of disease in aquaculture organisms. Topics covered will include species identification, habitat creation, reproduction, hatchery and nursery operation, and growth promotion in shrimp, prawns, crayfish, crabs, lobsters, brine shrimp, kelp, and other assorted seaweeds. Additionally, students will learn how to manage the health of these organisms, harvesting principles and techniques, processing procedures, and identifying appropriate markets for sale. Discussions will be focused on the pathobiology of organisms, with topics including cell death, inflammation, infection, metabolic disorders, and neoplasis across all species targeted in the aquaculture industry, as well as practices and techniques to control disease while maintaining a focus on global sustainability.
Credits: 3
Prerequisites: MBAQ 203

MBAQ 307 Ichthyology and Fish Health

This course is an overview of freshwater and marine fishes, their diversity, behavior, and health. Students will learn about the evolution, morphology, physiology, and life history of the global diversity of fishes, with an emphasis on integrating knowledge of fish anatomy and physiology in relation to their survival and wellbeing. Major diseases of captive-raised and farmed fish, including pathogenic control measures will be presented.
Credits: 3
Prerequisites: BIOL 105

MBAQ 310 Marine Mammal and Seabird Biology

This course will provide students with an in-depth exploration into the identification, evolution, anatomy & physiology, population biology, behavior, and ecology of marine mammals and seabirds. We will explore the breadth and evolutionary history of all marine mammals and seabirds, with a particular emphasis on what makes each

family and species unique. Students will become acquainted with the primary literature in this field and refine critical thinking and public speaking through in-depth projects. Multiple research projects will be pursued throughout the course across a wide range of topics related to the biology and ecology of these species, with a particular focus on conservation and ecology. In the pursuit of these projects, students will learn of the many sampling techniques used from land and sea platforms and discuss how their data impacts the health and survival of these important organisms.
Credits: 3
Prerequisites: BIOL 105

MBAQ 315 Diversity of Marine and Aquatic Vegetation

This course will provide students with an in-depth exploration into the marine and aquatic photosynthetic organisms, including their identification, classification, and phylogenic relationships. Topics will explore the ecology, diversity, and biography of algae and plants found in a variety of habitats throughout the globe. Specific work will focus on the propagation, reproduction, and survival of micro- and macroscopic plants, as well as the interaction between humans and vegetative communities. Students will become familiar with the basic sampling techniques used to sample aquatic and marine vegetation. Research projects will be pursued throughout the course across a wide range of topics related to the biology and ecology of these species with a particular focus on their conservation and ecology.
Credits: 3
Prerequisites: BIOL 103 and BIOL 105

MBAQ 401 Field Research in Marine Biology and Aquaculture

This course is focused on providing a broad spectrum of field-based research skills across marine biology and aquaculture. The theme, topic, and suite of skills will vary depending on when it is offered but will rotate when offered across biogeographic areas such as tropical, temperate, and cold-water areas, as well as across differing salinity habitats ranging from marine to freshwater, as well as brackish water and saltmarsh habitats, lakes, rivers, bays, and oceans. Students will conduct original research projects examining how organisms interact with their environment, with a particular focus on gaining proficiency in multiple research and assessment methods of aquatic and marine organisms. Students will use the skills developed in this course to plan and design their capstone research projects.
Credits: 3
Prerequisites: At least two 300-level MBAQ courses

MARKETING COURSES

MKTG 301 Environmental Marketing and Branding

As businesses become more aware of the need to be sustainable, being green will be the future, and professionals need to help companies with marketing sustainable business practices. This course covers an overview of concepts and techniques

related to marketing opportunities, strategies, communication, and effective marketing campaigns within the context of sustainability. Through case studies, students will analyze marketing strategies, plans, and decisions. Students will also explore why environmental marketing is a key aspect in business today.
Credits: 3
Prerequisites: None

MATH COURSES

MATH 101 College Algebra for Environmental Professionals

This class answers the age-old question, "will I ever use Algebra at my job?" Practical applications are emphasized throughout the course integrating it with other disciplines in environmental studies. Building on students' knowledge of algebra concepts and the skills to solve more complex mathematical operations and problem solving, students will learn to apply this knowledge to real-world problems. Students will acquire a range of basic math skills and understand how to apply them in their careers.
Credits: 3
Prerequisites: None

MATH 201 Statistics for Environmental Professionals

How do we come to know something about our world? Environmental science uses statistics as a tool to aid in this quest. Statistics covers how we collect data, how we characterize it, how we make inferences about the world using it, and what assumptions we make in the process. In this course students will gain an understanding of the basic principles of sampling design, probability and statistical distributions, data characterization, and common approaches to statistical modeling with an emphasis on regression and correlation and ways to evaluate differences among populations we have sampled. Students will explore literature to understand how these techniques are currently used in environmentally-based professions.
Credits: 3
Prerequisites: None

MATH 215 Calculus

This course is focused on functions and calculus computations. Students will use limits, derivatives, and integrals to analyze and describe the behavior of functions. Students will use these tools to solve application problems in a variety of settings, including the biological and social sciences. Topics include areas such as approximations, the fundamental theorem of calculus, extremum problems, curve-sketching, and the utility of derivatives in mathematical problems.
Credits: 3
Prerequisites: None

MATH 401 Statistics for Wildlife Professionals

Data collected by wildlife biologists often requires forms of analysis not covered in entry-level statistics courses. This advanced statistics course introduces students to techniques currently used by ecologists and covers the components of experimental design that create effective research and monitoring programs. Students learn components that influence both the design-based and model-based inference of their work. Experimental design focused on impact assessment and monitoring will be emphasized. The course also emphasizes regression-based approaches to data analysis. Students learn to conduct and interpret results from regression analysis, as well as model selection approaches based on information-theoretic and Bayesian approaches.
Credits: 3
Prerequisites: MATH 201

PHYSICS COURSES

PHYS 201 Physics 1

This course is designed to enhance your understanding of fundamental physical principles and phenomena through the study of mechanical motion and thermodynamics. Topics in this course include the three laws of thermodynamics, work and energy, heat transfer, kinematics, Newton's three laws of motion, momentum, and periodic and circular motion. Students will explore these topics and solve a wide array of physical problems using a background in basic algebra.
Credits: 3
Prerequisites: None

PHYS 202 Physics 1 Laboratory

This course includes the laboratory experience focused on mechanics and thermal physics meant to accompany PHYS 201.
Credits: 1
Prerequisites: PHYS 201 or concurrent enrollment

PHYS 203 Physics 2

This course is designed to enhance your understanding of fundamental physical principles and phenomena through the study of electricity, magnetism, and light. Topics in this course include Coulomb's and Faraday's laws, electricity, magnetic fields and circuits, and electric potential. Additional exploration will include the relationship between electromagnetism and light, light waves, and geometric optics, lenses, and mirrors. Students will explore these topics and solve a wide array of physical problems using a background in basic algebra.
Credits: 3
Prerequisites: None

PHYS 204 Physics 2 Laboratory

This course includes the laboratory experiences focused on electricity, magnetism,

and light meant to accompany PHYS 201.
Credits: 1
Prerequisites: PHYS 203 or concurrent enrollment

PSYCHOLOGY COURSES

PSYC 101 Introduction to Psychology

This course is a survey of psychology as the science of human behavior. Topics include basic principles underlying behavior and experience, learning, human development, motivation, personality, and psychotherapies.
Credits: 3
Prerequisites: None

PSYC 301 Environmental Psychology

This course explores critical issues in environmental psychology. Starting with foundational theories on place attachment and place identity, students will learn about the interrelationships between ourselves and the environment. Students will develop the ability to analyze environment-and-behavior issues, think more critically about the world around you, and understand the ways that we wield influence on the environment. Some topics the course will address include the history of environmental psychology, theories of environment and human behavior, environmental stress, natural environments, built environments, and changes in behavior as a result of global environmental shifts and sustainability.
Credits: 3
Prerequisites: None

RENEWABLE ENERGY COURSES

RNRG 101 Introduction to Green Energy: Politics and Implementation

This course explores the fundamentals of renewable energy resources including wind, solar, hydroelectric, geothermal, ocean dynamics, hydrogen fuel cell and biofuels. Students will compare and contrast these energy resources. Emphasis will be placed on evaluating the political, social and economic consequences of implementing green technologies in an industry currently based primarily on non-renewable energy resources.
Credits: 3
Prerequisites: None

RNRG 201 Renewable Energy: Science, Technology and Management

This course examines the science, technology and management of renewable energy resources. By assessing the growth potential of renewable energy markets and understanding the challenges of transitioning to green technologies, students will learn and apply the best practices of managing and leading change in the green energy market.
Credits: 3
Prerequisites: None

RNRG 301 Alternative Energy Technologies: Solar and Wind

This course provides an in-depth look at the components, equipment, mechanical systems and structural characteristics associated with solar and wind technologies. Students will model the installation and operation of solar and wind technologies and work collaboratively to develop a business plan to integrate solar and wind technologies into local energy markets.
Credits: 3

SOCIOLOGY COURSES

SOCI 101 Introduction to Environmental Sociology

Environmental professionals need to have a basic understanding of sociology, the study of society, social problems, and human social interactions with institutions. This course introduces students to the discipline of sociology by using environmental studies as a lens. In this course, students will learn about basic concepts in sociology and apply them to environmental sociology, the study of the relationship between human societies and the larger natural environment. Some questions this course will consider are the following: Why have some societies treated the environment differently than others? Is the reason economic? Is it technological? Is it religious? Does science help or is it part of the problem? How does the distribution of power affect the reasons? This class will cover a wide range of topics in order to give students an opportunity to reflect on how sociology contributes to important debates taking place about society and the environment.
Credits: 3
Prerequisites: None

SUSTAINABLE FOOD AND FARMING COURSES

SUFA 101 Farm to Table: Exploring Food Production Systems

This course will explore organic food production systems using the three pillars of sustainability—economic, environmental, and social justice. Topics will focus on USDA Organic market garden production but will compare and contrast it to other production systems. Discussions will cover the scientific and cultural underpinnings of sustainable and organic food production to develop the critical thinking and observation skills necessary to grow food using ecologically informed methods. Students will explore the farm and business management skills necessary to operate a small-

scale vegetable farm. We will delve into farm management practices that build healthy soil through cover cropping, crop rotations, crop / livestock integration, and no-till practices. Additionally, we will examine the hand-tools necessary to establish and manage a market garden operation. Farm business skills will focus on designing and creating a farm management plan as well as the record keeping systems necessary to track a crop from seed to plate.
Credits: 3
Prerequisites: None

SUFA 201 Sustainable Farm Management

Students in this course will study environmentally and socially sustainable enterprises to learn about management strategies for running a farming or food-based operation. Discussion will include farm management strategies, such as lean management strategies for farm operations and food establishments. We will also discuss business opportunities within all aspects of the greater food system. How does organic certification, Food Safety Moderation Act (FSMA) and other government regulatory requirements affect a business model? What infrastructure is needed? What is the role of County Extension, conservation districts, and USDA Natural Resources Conservation Services (NRCS)? Students will study the parts of a business plan, competitive business model, and a solid strategic plan. They will consider marketing, accounting, human resources, and strategic planning. Students will learn how to estimate taxes, do break-even analysis, calculate payroll costs and prepare pro forma financial statements.
Credits: 3
Prerequisites: None

SUFA 301 Production Systems: Permaculture, Greenhouses, Irrigation, and Ecological Design

In this course, students will learn quantitative and hands-on skills needed to measure, calculate, and work with sun and shade patterns, greenhouses, solar energy systems, passive solar structures, water-capture and irrigation systems, soil tests and plant nutrients, composting systems, seeding rates, planting densities, and yields for annual crops, cold storage, and natural building materials. Students will understand practical math skills appropriate to sustainable farming systems and ecological design. Topics include soil science, nutrient management, and crop botany, introduction to animal husbandry, successional crop planning, season extension, and the principles and practice of composting. Students will work together to design a food production system that takes into account solar energy, water management, irrigation design, disease, and weed and insect pest management.
Credits: 3
Prerequisites: None

VIRTUAL REALITY COURSES

EXRL 101 Introduction to Virtual Reality

This course will explore how Virtual Reality, Augmented Reality and Mixed Reality, collectively called Extended Reality, bring new perspectives to a broad range of fields including environmental science, sustainability, healthcare, design, engineering, architecture, tourism, law enforcement, marketing, and education. Students will engage with a variety of XR modalities, from mobile apps and computer-based simulations to fully immersive virtual reality experiences. Each student will be equipped with a VR head mounted display to discover firsthand the potential impact of this technology. Students will design an original concept for an XR application. The culmination of this course will be an XR product brief that students can use as a basis for future development, and as a strong portfolio piece for potential employers.
Credits: 2
Prerequisites: None

WILDLIFE CONSERVATION COURSES

WCON 201 Wildlife Plant Identification: Wildlands and Wildlife Habitat

This course centers around the identification and life history of groups of plants important as habitat components of wildlife species. Students will learn major plant groups and species in forest, rangeland, grassland, agricultural, and desert environments that influence wildlife species. Students will explore life history of these plants with the goal of understanding how habitat management activities, human land use, and other activities influence populations of wildlife through changes in food and cover.
Credits: 3
Prerequisites: Any biology course

WCON 301 Human Dimensions of Wildlife Conservation

Wildlife managers influence wildlife species using three 'levers': habitat, populations, or humans. This course addresses the human dimension of wildlife management. During the course students explore social, political, and economic concepts that are involved in effective wildlife management. Students will learn common forms of wildlife governance, the role of stakeholders, concepts from sociology, ethics, economics, management and decision-making as they relate to wildlife management.
Credits: 3
Prerequisites: Any biology course

WCON 303 Life History and Identification of Birds & Mammals

During this course, students will learn to identify avian and mammalian species with a focus on species at which management is often directed. These species include game bird and mammals, common agricultural or urban ‘pest’ species, and threatened or endangered species. Students will also learn basic life history of these species with a focus on characteristics useful for management. Students will be expected to conduct field activities directed at learning the species prominent in their region.
Credits: 3

Prerequisites: Any biology course

WCON 305 Wildlife Conservation Genetics

Genetics form a key component of modern wildlife management, providing tools aiding our understanding of taxonomy, conservation of small populations, and hybridization, as well as enabling non-invasive population monitoring and enhancing wildlife forensics. During this course, students will encounter the basic concepts of genetics, with an emphasis on population genetics and genetic techniques useful in wildlife management. Prominent topics covered include genetic variation, the role of gene flow and genetic drift on population viability, and key genetic markers used by wildlife biologists. Students will explore case studies illustrating the applicability of concepts in genetics to wildlife management.
Credits: 3
Prerequisites: Any biology course

WCON 307 Humans, Parasites, and Wildlife: Understanding the Impact of Insects on Wildlife

Insects, as the largest class of animals, have an extraordinarily large influence on ecosystem function. For humans they as vectors for important zoonotic diseases and pollinators of key food crops. For wildlife species they pollinate and feed on key plant species, vector prominent diseases, create large scale habitat change through plant disease outbreaks, and provide the primary source of animal matter for predators. During this class students will learn basic taxonomy and life history of insects, as well as explore case studies involving the role of insects in plant and animal disease, pollination, biological control, and other influences on ecosystem functioning.
Credits: 3
Prerequisites: Any biology course

WCON 403 Habitat Management for Wildlife

Wildlife managers influence wildlife species using three 'levers': habitat, populations, or humans. This course addresses the habitat dimension of wildlife management. Students will engage in discussions and activities to create understanding of the basic concept of habitat and its components, how various species identify, select, and interact with their habitat, and how this process influences how managers manipulate the environment to influence wildlife populations. Students will also gain familiarity with common habitat management tools and funding programs.
Credits: 3
Prerequisites: BIOL 203 or BIOL 305

WCON 405 Wildlife Population Management

Wildlife managers influence wildlife species using three 'levers': habitat, populations, or humans. This course addresses the population dimension of wildlife management. Students will explore how wildlife biologists measure and monitor demographic parameters of populations, including field techniques and analysis methods, with a focus on understanding strengths, weaknesses, and appropriate use of each technique. Students will consider ecological concepts and management techniques

used to manipulate wildlife populations including sustainable harvest, management of threatened and endangered species, and control of overabundant species.
Credits: 3
Prerequisites: BIOL 203 or BIOL 305

Graduate Course Descriptions

ANIMAL SCIENCE AND BEHAVIOR COURSES

ANIM 505 Animal Behavior and Modification

This course will focus on the science of animal behavior and learning. Students will learn how to define behavior through use of a behavioral ethogram and how to measure behavior through analysis of animal behavior videos. This course will also cover the three levels of environmental selection that impact behavior with a focus on how individual behavior can be shaped by interactions with the environment. Students will explore basic principles of animal learning including associative and non-associative learning and classical, operant conditioning, habituation, dishabituation, and sensitization. Finally students will learn about the three-term contingency and how to modify behavior through use of environmental contingencies.
Credits: 3

ANIM 510 Canine and Feline Nutrition

This course is focused on the concepts of and science behind animal health specific to canine and feline nutrition, including digestion, absorption, dietary requirements, and consumption needs. Discussions will focus on the effects of nutrition on the health and wellness of canines and felines. Emphasis will be placed in the dietary management of various disorders and diseases in these animal groups. Students will also explore how proper nutrition and feeding schedules can be implemented to promote companion animal welfare.
Credits: 3

ANIM 520 Equine Nutrition

This course will explore equine nutritional needs and the essential elements of maintaining a healthy horse. With an emphasis on feeds, diet, and its relationship to health and performance, students will learn how proper nutrition and feeding schedules can be implemented to promote proper equine welfare. This course will also investigate environmental factors that influence horse health and connect the dietary management of various disorders and diseases to equine health and performance.
Credits: 3

ANIM 605 Advanced Animal Training

This course will explore the science and theory of animal learning and how to apply learning principles to train animals. Students will review various practices and

techniques that form the art of animal training. Students will learn about the principles of reinforcement and punishment, schedules of reinforcement, and how to utilize positive reinforcement to build stronger communication between the trainer and the animal. Students will also learn fear free training techniques, how to pick a reward, and training tools such as shaping, capturing, and luring to encourage animals to exhibit a desired behavior. The knowledge and skills learned in this course may be utilized to assist with medical evaluations, treatments, or procedures, and to help meet a variety of management and animal welfare goals.
Credits: 3

ANIM 610 Animal Shelter Best Practices and Management

Animal shelters strive to balance animal welfare science with practical and realistic expectations that can be achieved to provide a high standard of care for their animals and meet the needs of the public. This course provides recommendations on best practices for animal health and care at animal shelters with an emphasis on facility design, record keeping, population management, sanitation, monitoring health and behavior, handling, euthanasia, spaying and neutering, animal transport, and care procedures that maximize animal welfare. This course is intended to provide students with an understanding of the role of a manager in an animal shelter and practice the interpersonal and management skills required to fill the role of an Animal Shelter Manager.
Credits: 3

ANIM 620 Best Management Practices for Ranches and Stables

This course will review the best management practices and safety procedures recommended for ranch and stable managers. The emphasis of this course will include barn hygiene, air quality, safety audits, implementing practices to reduce grazing pressure and pasture quality, manage nutrient gains on pastures, manage water flow, and deliberate fencing to reduce impact on nearby streams and waterways. Students will learn the importance of properly managing the natural environment to optimize the health and welfare of horses, including concepts related to natural ecosystems, ecosystem services, and beneficial management practices.
Credits: 3

ANIM 630 Emotional Support and Service Animals: Rules and Regulations

This course will focus on rules, regulations, laws and training encompassed and/or required by service, emotional support and therapy animals. Students will explore principles of human-animal interactions and potential human health benefits of animals in society. This course will provide students with the ability to provide guidance to public and private stakeholders that seek support in understanding and enforcing the rules and regulations for these animal groups to minimize risk or harm to animals and/or humans. In doing so, students will explore current controversies and analyze current case studies regarding the use of animals in service, emotional support and therapy animal roles.
Credits: 3

CONSERVATION LAW ENFORCEMENT COURSES

CONL 505 Conservation Law Enforcement Management

This course examines the structure of a conservation enforcement agency to achieve maximum effectiveness toward the mission of an organization. Beginning with a statutory foundation at the federal or state level, this course will look at a variety of factors such as size of workforce, budget, contracts, work rules; and public policy, to shape a cost-efficient organization. This course will also look at structure of supervision, span of control, career advancement, use of special teams and support operations. Students will examine operational policies and procedures and learn the value of providing consistent direction to throughout the chain of command.
Credits: 3

CONL 510 Operational Human Resources Management

Civil service laws and rules control the work practices of public service enforcement agencies. This course will take a hands-on look at how such laws and rules direct the day to day operations of a conservation enforcement agency. Topics such as job specifications, position reclassification, performance management, personnel investigations; grievances, and arbitration will be examined. Students will review labor contracts and understand the principles of collective bargaining for conservation enforcement agencies.
Credits: 3

CONL 515 Advanced Wildlife Enforcement

Enforcers of wildlife laws around the globe face a multitude of challenges. Technology has created an interface of humans and wildlife that has changed the face of conservation enforcement. From a local to global perspective this course analyzes how technology and other enforcement practices can be used to combat the illegal taking of wildlife. Topics such as human dimensions, overt vs. covert operations, surveillance practices will be examined.
Credits: 3

CONL 520 Judicial Procedure and Evidence Management

This course will examine the judicial system focusing on the appellate court process at the state and federal level. Students will analyze court decisions and how they control enforcement practices within their jurisdiction. The course will examine evidence management issues including but not limited to electronic evidence, requirements for expert witnesses, and the use of DNA evidence.
Credits: 3

CONL 525 Conservation Law Enforcement and Public Policy

This course examines natural resource policy globally, and at the federal and state level demonstrating regional and societal differences. Enforcement administrators learn to understand the impacts of natural resource-based policy and how it directs the focus of agency. From a global perspective various treaties and conventions will

be discussed. At the state and federal level topics such as the Endangered Species Act, Lacey Act will be reviewed.
Credits: 3

CONL 610 Diversity in Conservation Law Enforcement

This course will explore the demographics of the United States and look at diversity from a broad perspective, including but not limited to ethnicity, gender, and economics. Students will understand how diversity affects agency enforcement policies and procedures. The course will also identify management level considerations for creating a diverse natural resource enforcement agency, considering federal and state laws, and policies.
Credits: 3

ENVIRONMENTAL SCIENCE COURSES

ESCI 605 Water and Soil Resource Management

This course will cover a range of topics relating to soil and water management, such as basic soil and water interactions, salinity and sodicity issues, soil erosion, chemical transport, and water use efficiency. Processes that degrade soil and water resources (e.g. erosion, salinity, alkalinity and sodicity, as well as acidification, water repellence, and degradation of soil structure) are examined, and their measurement, avoidance, and management discussed. Broader issues in soil and water conservation are also covered.
Credits: 3

ESCI 610 Environmental Analysis: Atmosphere, Soil, and Water

This environmental science course covers a broad range of analytical techniques related to soil, air, and water systems. Sample preparation procedures and sampling methods are covered, as are key soil chemical processes, air quality sampling, water sampling, and how they are quantified. The application of techniques is discussed using case studies and environmental problem-solving. The influence of air, water, and soil pollution on environments locally and globally will also be discussed.
Credits: 3

GEOGRAPHIC INFORMATION SCIENCE COURSES

GISC 505 GIS and Remote Sensing for Environmental Solutions

This course is intended to introduce students to GIS and remote sensing software and tools used to solve real-world environmental problems. Students will learn concepts and data sources and formats used in environmental research they may encounter in careers in environmental science. This course introduces the fundamentals of cartography, photogrammetry, geographic information science, and remote sensing through maps and spatial analysis used to answer various environmental and ecological issues. This course will also introduce students to use map and data outputs

in the decision-making process that can impact environmental assessments and determinations.
Credits: 3

GISC 510 Advanced GIS and Remote Sensing for Ecological Applications

This course is intended to build upon introductory course knowledge. This course will teach students to understand and apply more advanced methodologies using GIS and remote sensing technologies. They will apply knowledge gained in this course to environmental concepts they may be exposed to in their careers. Types of data used will include vector and raster spatial data, imagery, maps, and topographic data to examine environmental problems. Data assessed will include spatial information regarding human and natural hazards and disasters, land use and land cover, surface temperature, climate change, wetland delineation, wildlife corridor mapping, coastal erosion, human impacts on the environment, and more. Students can use this data to gain insights and make problem solving decisions regarding real-world environmental issues they may encounter during their careers.
Credits: 3
Prerequisites: GISC 505 GIS and Remote Sensing for Environmental Solutions

GISC 515 Environmental Research Methods

This course will expand upon GIS and remote sensing concepts, techniques, and tools used in environmental research. Students will gather, process, and analyze data from a variety of sources. Data sources will include GIS and remotely sensed data from online repositories like USGS Earth Explorer, Google Earth, state GIS repositories, the National Atlas Viewer, the NPS IRMA Data Portal, the NRCS Soil Data Viewer, and the USDA Geospatial Data Gateway. Types of data examined will include vector and raster spatial data, imagery, maps, and topographic data. Students will also learn to gather, process, and analyze basic geographic data using tools they have access to including GPS devices including watches, smartphones, cameras, and trackers.
Credits: 3
Prerequisites: GISC 505 GIS and Remote Sensing for Environmental Solutions

GISC 520 Creating Maps and Graphics of Ecosystem Change

This course is intended to introduce students to theory and practice of cartography and visualization. This course will teach students to learn, to think, and to communicate visually using a variety of environmental GIS data. Activities and a final project will teach students to visually display and examine environmental problems. Students will learn symbology, coordinate systems, map projections, topographic representations, interpolation, classification schemes, and more to effectively visually communicate real-world environmental problems and solutions to scientific and general public audiences.
Credits: 3
Prerequisites: GISC 505 GIS and Remote Sensing for Environmental Solutions

GISC 525 Project Development for Environmental Problem Solving

This course will apply all the knowledge and skills students have learned in the

Professional Skills and Environmental GIScience core courses. Students will work with faculty or a government or private institution to solve a real-world environmental problem. Faculty will work with each student to identify an area of interest or need and begin to put together a portfolio of professional work for student's intended or current careers. Note: Must be scheduled by an advisor in accordance with academic plan.
Credits: 3
Prerequisites: GISC 505

GISC 605 Modeling Our Changing World

This course is intended to continue to build on the concepts and techniques learned in previous GIS and remote sensing courses. Students will learn to model and analyze real-world environmental science problems (e.g. past and future impacts of climate change on the Earth). A model is a simulation of the real-world. Students will model raster and vector data using algorithms and basic programming language. Students will use various proprietary and/or open source software to model and analyze environmental data including ArcGIS, and standalone Free and Open Source Software (FOSS) tools.
Credits: 3
Prerequisites: GISC 505

GISC 690 Environmental GIScience Capstone

The Capstone course project will be the culmination of the knowledge and skills learned throughout the Environmental GIScience program. Students will complete processing, analysis, and interpretation GIS and remotely sensed data to solve the real-world environmental problem of interest identified in the Project Development course. Students will present their final projects in oral, visual, or written form to a public audience. This can include conferences, industry professionals, community town hall meetings, and more. Examples of final projects formats can include factsheets, peer-reviewed articles, project reports, interactive graphics or animations, poster presentations, YouTube videos, PowerPoint presentations, websites, and more. Note: Must be scheduled by an advisor in accordance with academic plan.
Credits: 3
Prerequisites: GISC 505

MARINE SCIENCE COURSES

MARI 505 Dynamics of Marine Ecosystems

This course will provide students with an understanding of fundamental biological, chemical, geological, and physical interactions in marine ecosystems. Students will learn the importance of considering temporal and spatial scale when studying oceanic processes and habitats. Topics include vertical structure of coastal and pelagic environments, ocean circulation, global oscillation patterns, distribution and dispersal of

phyto- and zooplankton, and the global climate system and climate change. Students will review scientific literature and apply principles of marine ecosystem dynamics to design a research project to examine the connections between ecosystem dynamics and marine conservation.
Credits: 3

MARI 510 Conservation of Marine Predators

This course provides students with a deep understanding of ecology, diversity, natural history and behavior of marine predators, and the implications of the global decline of these species. Students will review the historical and contemporary threats to these species and explore sustainable solutions for the conservation of these important marine species. With an emphasis on synthesizing scientific literature, data analysis and interpretation, students will develop a conservation strategy to ensure the future sustainability of marine predators.
Credits: 3

MARI 515 Coral Ecology and Conservation

This course will explore the biology of corals including the parameters necessary for healthy growth, reproduction and reef formation. Students will learn to distinguish between different types of corals based on physical characteristics and distribution. Current threats to corals and reef health such as coral bleaching, black band disease and ocean acidification will be examined along with management and restoration strategies.
Credits: 3

MARI 520 Identification and Life History of Marine Mammals

This course will provide students with an in-depth exploration into the identification, evolution, anatomy & physiology, population biology, behavior, and ecology of marine mammals. We will explore the breadth and evolutionary history of all marine mammals, with a particular emphasis on what makes each family and species unique. Students will examine the sampling techniques employed to survey these organisms and discuss how this data impacts the health and survival of these important organisms. Lastly this course will identify local, national and global threats facing marine mammals and describe multiple solutions to counteract and address these threats.
Credits: 3

MARI 605 Sustainable Management of Marine Resources

This course will provide an overview to the structure and functioning of marine ecosystems, and acquaint students with the basic biology and field techniques required to successfully and sustainably manage marine populations. This course will expose students to a number of challenges facing marine ecosystems, and will provide

an opportunity to discuss activities, approaches and strategies that can be used to solve these challenges. While many examples and scenarios discussed will be based on regional issues, the course will emphasize a global perspective to marine conservation issues and how regional differences in problems and solutions exist. Emphasis will be placed on the importance of using sound science to generate successful management strategies.
Credits: 3

MARI 615 Coral Reef Restoration and Aquaculture

Coral reefs are one of the most diverse ecosystems on earth and act as carbon sinks allowing the reduction of the concentration of atmospheric carbon dioxide, thus playing an important role in climate dynamics. Today many coral reef systems are in a state of decline and therefore protecting and repopulating damaged reefs is an important component of coral reef conservation. From a local to global perspective students in this course will review the major threats to coral reef ecosystems and seek solutions to these threats by exploring the role of artificial reefs, marine protected areas and aquaculture in the restoration of coral reefs.
Credits: 3

MARI 620 Marine Mammal Rescue and Rehabilitation

The primary goal of marine mammal rescue and rehabilitation is to release healthy animals back into the wild. In this class students will learn about the methods used to rescue and rehabilitate marine mammals, including cetaceans, manatees, walrus, seals, and sea lions. Students will follow the steps of rescue from notification through assessment, examination and standard rehabilitation practices, and transportation methods and release protocols. Government programs that guide the protocols of marine mammal rescue, public relations, and funding needed to support rescue operations will also be reviewed. Students will draft their own animal rescue plan from initial encounter to release or permanent housing.
Credits: 3

MATHEMATICS COURSES

MATH 520 Quantitative Reasoning and Scientific Thought

This course provides managers with a basic quantitative literacy to enhance their ability to evaluate and interpret current ecological literature, and to implement management procedures that help advance understanding of the systems they manage. Topics include ecological study design, use of models in ecology, and advanced statistical approaches such as information-theoretic and Bayesian methods.
Credits: 3

MATH 540 Quantitative Methods for Sustainable Solutions

This course provides students with basic quantitative literacy such as data analysis and statistical computing to enhance their ability to evaluate and interpret data. Students will learn to use that data to implement procedures that help advance the public's understanding of sustainability and environmental issues. Emphasis will be on visualization and quantitative reasoning. Assignments are grounded in real-world problems and data from the social sciences.
Credits: 3

MATH 620 Statistics and Data Management for Science Professionals

This course implements common statistical procedures used to analyze ecological data. Students will learn how to merge, synthesize, edit and summarize large data sets. Emphasis is placed on application of and inferential methods for evaluating linear models using numerous probability distributions. Extensions of these models for estimating population and community parameters such as occupancy, abundance, and survival are also covered.
Credits: 3

PROFESSIONAL SCIENCE COURSES

PROF 505 Strategic Management of Innovation

The course is designed to help students understand the strategic, organizational and human issues that can either help or hinder you (and the organizations, both private and public, you work for) in efforts to develop and implement science-based solutions to environmental and natural resource challenges. It combines the study of those principles needed to manage scientific innovation with an emphasis on how environmental innovation fits within an organization's strategy and business model, and why they matter, and how one creates an innovative learning organization, drives change within an organization, and drives the adoption of the innovations the organization creates.
Credits: 3

PROF 510 Communication for Environmental Professionals

This course will provide students the opportunity to develop vital professional skills in oral and written communication while preparing them to communicate clearly about science, policy, and technology issues with demographically diverse and geographically dispersed audiences. Content will address mass media and public understanding of science; organizational communication issues such as structure and communication networks; rhetoric, advocacy, and strategic message development; the role of public opinion and public policy; innovation and decision making; crisis communication and conflict management; emerging communication technologies; and inter-organizational and cross-disciplinary communication.
Credits: 3

PROF 515 Ethical Practice and Policy

This course will investigate some of the ethical dimensions of a life in professional science, examining dimensions of environmental and natural resource science and policy in the context of globalization, global change, and climate change. The course builds on the communications skill set of the science communication course by including a module on the role of science in society. Students critically evaluate the ethical dimensions of common scientific practice and policy issues related to sustainability and natural resources.
Credits: 3

PROF 590 Capstone I

This course guides students through the creation of a capstone project. Students from all degree tracks solve real-world problems through application of the variety of skills and knowledge acquired during their master's experience. Students work to develop projects that demonstrate transdisciplinary thinking, analyze complex systems, and develop and communicate solutions to posed problems. Note: Must be scheduled by an advisor in accordance with academic plan.
Credits: 3

PROF 690 Capstone II

This course is the culminating experience of obtaining the Master of Professional Science degree at Unity College. Students will work to solve real-world problems through application of the variety of skills and knowledge acquired during their master's experience. Collaborators work to demonstrate transdisciplinary thinking, analyze complex systems, and develop and communicate solutions to posed problems. Students will complete their capstone projects in their fields of interest. Note: Must be scheduled by an advisor in accordance with academic plan.
Credits: 3
Prerequisites: PROF 590 Capstone I

SUSTAINABLE BUSINESS COURSES

SBUS 505 Accounting and Finance for Sustainable Business

This course examines the principles of financial and managerial accounting for strategic decision-making and assessment of the financial strength of sustainably-minded organizations. Discussions will include the essentials of cost accounting, minimizing the costs and risks posed by operations and environmental liabilities, developing effective operational planning and capital budgeting processes, and effectively managing a firm's investments.
Credits: 3

SBUS 515 Ecological Economics

Economic systems influence how society understands its relationship to the environment. From the neo-classical synthesis to socialism, none of our contemporary economic systems seems to provide the social and environmental resilience that sustainability theory demands. The interdisciplinary field of ecological economics attempts to overcome the deficiencies in traditional economic theory, first by

recognizing the physical limits in which any economic system operates and then by including normative values into a holistic economic system. Students will learn the basic principles of ecological economics, evaluate the framework, and learn to apply its principles to sustainability work.
Credits: 3

SBUS 520 Global Impact of Capital Markets

This course explores the foundations of financial markets, how they operation, and how to assess performance. Students explore market behavior from a global perspective and how financial institutions operate. Key concepts include economic instability, government intervention, and how to value sustainability.
Credits: 3

SBUS 525 Designing Successful Teams & Organizations

This course covers some of the skills that help organizations to thrive in a multicultural business environment, such as effective teamwork, the ability to set and reaching goals, and effective human resource strategies. Students will learn about leadership and communications skills for business leaders, group collaboration, and engaging employees and stakeholders to reach their full potential.
Credits: 3

SBUS 530 Business Ethics for 21st Century Leaders

Recent events have demonstrated that ethical failures by business leaders can have major consequences across the globe. It is important for businesses to identify when ethical issues emerge and how to address them. Organizations can create a strategic advantage by taking a triple bottom line approach to business by considering social, environmental and economic factors.
Credits: 3

SBUS 535 Marketing & Communicating Corporate Social Responsibility

This course enables students to apply business data to solve organizational issues. Organizing and interpreting relevant information allows organizations to make informed business decisions and make sound forecasts.
Credits: 3

SBUS 540 Quantitative Methods for Sustainable Solutions

Effective marketing is essential for overall business success. This course explores marketing in a sustainable organization and creating beneficial relationships with stakeholders. Students learn how to brand an organization, determine consumer demand, identify target markets, create brand positioning, and develop pricing strategies.
Credits: 3

SUSTAINABLE NATURAL RESOURCE MANAGEMENT COURSES

SNRM 505 Human Dimensions of Natural Resource Management

This course considers the human dimensions aspects of natural resource management. Topics include approaches to stakeholder involvement in management, conflict resolution, and decision-making approaches through case studies and human-dimensions research. Students learn principles that are needed to find science-based and socially acceptable solutions to natural resource management problems.
Credits: 3

SNRM 507 Wildlife Ecology and Management

This course emphasizes the key ecological concepts and management principles involved in the management of free-ranging animal populations. This course provides an overview of community and population ecology, habitat and population management, and role of human dimensions in successful wildlife management. Topics include aspects of game and non-game management including harvest management, species recovery and nuisance wildlife. Students will learn and discuss these principles and concepts as they relate to current issues encountered by wildlife managers.
Credits: 3

SNRM 509 Wildlife Identification

This course covers the principles of identifying wildlife species, including mammals, birds, reptiles, and amphibians. This survey course will focus on understanding the features of these groups and life history characteristics that inform management of these species. Identification will focus on key species of management importance in each of these groups, and students will be expected to conduct field activities directed at learning the species prominent in their region.
Credits: 3

SNRM 510 Landscape Ecology

Landscape ecology focuses on the relationships between scale, spatial pattern, and ecological processes. Emphasis will be placed on landscape perspectives and practices as they relate to the management and conservation of populations and communities. This course will explore the importance of scale in assessing pattern and process and how landscape structure is characterized. We will examine the abiotic and biotic drivers of landscape patterns including land- use legacies and disturbance regimes. Other topics to be addressed include how populations and communities are structured across the landscape and respond to landscape change.
Credits: 3

SNRM 515 Conservation Ecology

This course presents concepts from multiple biological disciplines, including population ecology, evolutionary biology, genetics, behavioral ecology, sociology, as well as sociology and policy. Discussion illustrates the value of transdisciplinary thinking in solving conservation challenges. Students practice management and conservation problem solving by integration and application of course concepts to real-world case studies with an ecological focus.

Credits: 3

SUSTAINABILITY COURSES

SUST 505 Thinking in Systems

Ecological, economic, and social systems have complex interactions which can make management inherently difficult. Students will examine examples of these systems from both a top-down and bottom-up perspective. From a top-down perspective, students will use statistical tools to mine information about systems, as understanding system patterns and measures can help managers anticipate how systems will change under natural or artificially applied modifications. In some cases, modifying these interactions (due to variation in environment or natural or applied pressures) can produce unexpected results. Therefore, students will also examine systems from a bottom-up perspective, using quantitative tools to model systems and examine their responses under changing conditions.
Credits: 3

SUST 510 Climate Dynamics

Climate change is the defining environmental issue of the 21st century. Sustainability scientists and natural resource managers should be able to follow the emerging science and communicate it to a wide variety of audiences. This course 1) examines the science of climate and climate change, and 2) considers the environmental and socio-economic challenges associated with climate change and 3) explores strategies to increase the resilience of natural and human communities to these challenges. Throughout the course we will examine the role energy production has on the climate system and evaluate different methods for energy production in light of climate change.
Credits: 3

SUST 515 Leading Sustainable Change

The community dimension of sustainability science sets it apart from historical scientific problem solving. Truly sustainable solutions need to meet economic and cultural acceptability to be implemented politically, and the process of seeking solutions can change community perceptions. Through techniques for understanding the nature of stakeholders and the use of social marketing, sustainability professionals can strongly influence perceptions and behavior. In this course, students will practice research-based stakeholder analysis and social marketing.
Credits: 3

SUST 520 Community Planning for Resiliency

It is increasingly essential that we couple our greenhouse gas reduction actions with preparations for climate extremes and other changes, both expected and unexpected. As the footprint of human society continues to grow, managing the built environment for resilience becomes one of the primary leverage points for mitigation of sustainability problems, and an important focus of adaptation. From buildings to transportation networks to the relationship between urban communities and their rural

resource bases, a strategically developed built environment dramatically reduces the carbon footprint, protects open space, and fosters social cohesion. We will enlist successful frameworks used in community design and green building as we explore ways in which communities can anticipate and adapt to the consequences of climate change while contributing to global mitigation efforts.
Credits: 3

URBAN ECOLOGY AND SUSTAINABLE PLANNING COURSES

UESP 505 Sustainable Design: Green Spaces and Urban Nature

This course introduces students to principles of sustainable design with an emphasis on green spaces in urban environments. It will provide students with a framework to move beyond superficial greening efforts to create plans that highlight people, planet, profit, and purpose. Upon completion, students will have a critical vocabulary about the complexity, cost, and scale of the challenges in designing green spaces in urban environments.
Credits: 3

UESP 605 Sustainable Design: Creating Sustainable Buildings

This course will focus on design thinking and design principles with an emphasis on the built environment in urban settings. Students will learn ways to re-envision the built environment as "living" and as an active community member that contributes to the urban ecological landscape. Students will learn about building infrastructure to help design buildings that contribute to its urban ecosystem(s). This course will emphasize design thinking, teach students strategies for managing the complexities when designing new buildings or redesigning existing ones, and explore the role of economics and human beings in this process.
Credits: 3

UESP 615 Planning for Human-Wildlife Interactions in Urban Environments

This course is an introduction to both the issues surrounding human-wildlife interactions in urban environments and an exploration into meaningful plans to support productive ecological coexistence. After providing a historical context and background on current conservation efforts, students will learn innovative strategies to support areas which are valuable to both humans and wildlife. Topics covered will include multi-level policy development, ecological economies of wildlife in urban spaces, zoonotic disease transmission and prevention, global encroachment trends, hunting in relation to wildlife abundance, and even tourism practices in urban environments. Students will additionally be exposed to the principles of wildlife forensics and learn how to design and implement culturally appropriate and community-led solutions to human-wildlife challenges.
Credits: 3

SECTION 8: COLLEGE POLICIES

Honor Code

The Unity College Honor Code requires that students be honest in all academic work. By joining the Unity College Community, students express willingness to accept the responsibilities and privileges of the academic community. Academic dishonesty threatens the mission of Unity College and potentially jeopardizes the success and integrity of its students and programs. Every Unity College student is responsible for upholding the principles of academic honesty. Personal ethics and integrity should govern all actions.

Academic Dishonesty

Cases of dishonesty in Distance Education academic matters are referred to the Dean or Vice President of Distance Education (VP). The actions of the Dean or VP may include any combination of the following:

- Investigate alleged violations of the Honor Code
- Arbitrate instances of academic dishonesty not settled to the student's or the faculty member's satisfaction
- Determine whether the Honor Code has been violated and specify consequences
- Maintain a record of alleged infractions and subsequent findings

If a Distance Education faculty member suspects a violation of the Honor Code, they will notify the Dean or VP and discuss the matter with the alleged violator. If the matter is not resolved to the satisfaction of both parties, either party may appeal to the proper administrative channels which is first, Dean or Vice President of Distance Education, and then if the parties feel that the Dean or Vice President of Distance Education did not follow due process, the President. The President's decision is final.

Academic dishonesty includes, but is not limited to, the following:

Plagiarism

We acknowledge the difference between citation errors, in which a writer incorrectly cites a source, and plagiarism, in which a writer engages in any of the following:

- Quoting, summarizing, or paraphrasing any part or all of a source without acknowledging the source in the text of any work.
- Incorporating any information—data, statistics, examples, etc. — that is not common knowledge without attributing the source of that information.
- Using another's images, sounds, opinions, research, or arguments without attribution.

- Failing to follow fair-use policies, which dictate informal acknowledgement or formal citation depending upon the context and assignment.
- Submitting work that someone else completed.
- Submitting an assignment for one class in another class without approval of both instructors.
- Please refer to Purdue OWLS's Plagiarism FAQs for more information.

Cheating

- Submitting an assignment for one class in another class without approval.
- Claiming credit for work not done independently (excluding College support services such as the Collaborative Learning Center) without giving credit for aid received.
- Seeking out, accepting, or actively aiding in any unauthorized collaboration or communication during examinations. This includes but is not limited to sharing answers and using technology without prior permission.

Misrepresentation

When someone other than the student enrolled in the course completes any part of the coursework.

Falsification

Falsifying or deliberately misrepresenting data and/or submission of work.

The Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. These rights include:

Inspection of Records

A student has the right to inspect and review their education records within 45 days of the day the College receives a request for access. If a student wishes to inspect their education records, they should contact the Registrar to make arrangements.

Amendment of Records

A student has the right to request the amendment of their education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the College to amend a record should write to the Registrar, clearly identify the part of the record the student wants changed, and specify why it is inaccurate or misleading.

If the College decides not to amend the record as requested, the College will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

Disclosure of Records

Unity College must obtain a student's written consent prior to disclosure of personally identifiable information contained in educational records except in circumstances permitted by law or regulations, some of which are summarized below.

Directory Information

Unity College designates the following student information as directory information that may be made public at its discretion: name, address, telephone listing, email address, photograph, date and place of birth, major field of study, grade level, enrollment status, most recent educational agency or institution attended, and student ID number or other identifier other than a Social Security number (but only if the identifiers cannot be used to gain access directly to education records without one or more other factors such as a password), participation and level of students in officially recognized activities, dates of attendance in the College, degrees, honors and awards received, and photographs and videos relating to student participation in campus activities open to the public.

Students who do not want the College to disclose directory information must notify the Registrar's Office in writing. This opt-out request will remain in effect unless and until it is rescinded by the student in writing.

School Officials with Legitimate Educational Interests

Education records may be disclosed to school officials with a legitimate educational interest. A school official has a legitimate educational interest if they need to review an education record in order to fulfill his/her professional responsibility. School officials include persons employed by the College as an administrator, supervisor, academic or research faculty or staff, or support staff member (including health or medical staff and law enforcement unit personnel); persons or companies with whom the College has contracted to provide specific services (such as attorneys, auditors, medical consultants, field placement supervisors and other related personnel, collection agencies, evaluators or therapists); Board of Trustee members; students serving on official committees or assisting other school officials in performing their tasks; and volunteers who are under the direct control of the College with regard to education records.

Student Identity Verification Policy

In compliance with the provisions of the United States Federal Higher Education Opportunity Act (HEOA) of 2008, Public Law 110-315, concerning the verification of student identity in distance learning, Unity College has established and will periodically evaluate its process to confirm that person who is enrolling in the College is the person who is completing the enrollment form, that a student taking an examination is the student who registered to take the

examination, and that the student who is registered for an online course is the same student who participates in, completes, and receives credit for the course.

To authenticate identities, Unity College will use one or more of the following methods for verification:

- A secure login with username and password
- Proctored examinations
- New or emerging technologies and practices that are effective in verifying student identification

All methods of verifying student identity must protect the privacy of student information in accordance with the Family Educational Rights and Privacy Act (FERPA), any other applicable laws or regulations regarding the confidentiality of personally identifiable information, and the College's Privacy Policy.

Personally identifiable information collected by the College may be used as the basis for identity verification. This information may include a combination of the following:

- Student ID number
- Last four digits of the student's Social Security Number
- At least two other pieces of information such as the student's email address on file, date of birth, address, or username, etc.

Active Duty and Veteran Students

Unity College welcomes applications from veterans, active military members, and their dependents. Any student wishing to use educational benefits from the Veterans Administration must submit a copy of a Certificate of Eligibility or Tuition Assistance voucher to their assigned Concierge. Veterans using Vocational Rehabilitation and Employment benefits must inform their VA counselor of their intention to attend Unity College.

Veterans, active military members, and their dependents are also eligible for a 10% discount on tuition, regardless if they are using VA educational benefits. Such students may disclose their status on their admissions application or notify their DE Concierge to receive the discount.

VA Benefits

The degree programs of Unity College are approved by the Maine State Approving Agency for Veterans Education Programs for persons eligible for educational benefits (GI Bill®) from the U.S. Department of Veteran Affairs. Students who have questions about their eligibility should visit the Veterans Administration web site at Veteran Administration or call (888) 442-4551.

Veteran students are expected to complete all registered courses each term. Any

change in academic workload must be reported to the College. Failure to do so may result in incurring debt.

Under S2248 PL 115-407 Section 103, Unity College will not impose a late fee, denial of access to facilities, or other penalty against a veteran or eligible dependent due to a late payment of tuition and/or fees from the VA up to the certified benefits amount. Any portion of the student bill not covered by VA benefits is still expected to be settled by the due date.

Military Tuition Assistance

Military tuition assistance [TA] is awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of TA funds originally awarded. To comply with the Department of Defense [DoD] policy, Unity College will return to the DoD any unearned TA funds on a prorated basis through at least the 60% portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned when a student stops attending. In instances when a Service member stops attending due to a military service obligation, Unity College will work with the affected service member to identify solutions that will not result in a student debt for the returned portion in compliance with the DoD policy.

Schedule for returning unearned TA

5-Week Courses [35 days in term]

- Drop course before third day of term: 100% returned
- Withdrawal from course, days 4-11: 80% returned
- Withdrawal from course, days 12-17: 60% returned
- Withdrawal from course, days 18-21: 45% returned
- Withdrawal from course, days 22-35: 0% returned

8-Week Courses [56 days in term]

- Drop course before third day of term: 100% returned
- Withdrawal from course, days 4-17: 75% returned
- Withdrawal from course, days 18-25: 50% returned
- Withdrawal from course, days 26-33: 40% returned
- Withdrawal from course, days 34-56: 0% returned

For those courses that have durations differing from those listed above: unearned TA funds will be returned on a prorated basis, depending on the length of the course. To determine the amount of TA that needs to be returned, the institution will determine the date the withdrawal was submitted, then divide that by the number of days in

the term to determine the percentage of TA that was earned by the student.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at GI Bill.

SECTION 9: RESOURCES

Academic Calendar

Please see the webpage for the current academic calendar:
https://online.unity.edu/academic-calendar/

College Resources

The mailing address for all Unity College correspondence is:

Unity College, Distance Education
90 Quaker Hill Road Unity, ME 04988-9502

College Switchboard: (207) 509-7100; or call (207) 509-7155

College Website: www.online.unity.edu

Associate Dean for Retention and Completion/
ADA Coordinator for Distance Education
(207) 509-7231

Concierge Services
online@unity.edu: (207) 509-7155

Registrar
registrarsoffice@unity.edu: (207) 509-7257

Student Financial Services
fin_aid@unity.edu: (207) 509-7235

Quimby Library
library@unity.edu: (207) 509-7178

Date Modified: October 20, 2021
Adoption Chain: DE Leadership, President

DE Catalog Addendum for November 2021

Removal of Sustainable Business undergraduate concentration. *Approved 6/3/2021; page 52.*

Update to military student information section title. *Page 123.*

Addition of the Return of Military Tuition Assistance policy and return rates. *Page 124.*