1. Course Information:

1.1 Course Prefix and Number: SUS 355
   Course Title: Conservation Biology and Landscape Ecology
   (If a new or renumbered course, please check with the Registrar regarding the use or reuse of the course number)

1.2 ☒ This is a New Course.
   OR
   ☐ This is a Major Course Revision
   OR
   ☐ This is a Minor Course Revision

If this is a Course Revision, please see Course Proposal Form – Instructions and Guidance to determine if your revision is major or minor. Indicate below the reason(s) for the revision.

(Please check all that apply)

☐ Course Number/Division  ☐ Learning Outcomes  ☐ Institutional Resources
☐ Title  ☐ Concepts, Content  ☐ Semester Offered
☐ Credit hours  ☐ Catalog Description  ☐ Course Inactivation
☐ Pre- or Co-requisite(s)  ☐ Instructional Methods  ☐ Course Reactivation
☐ Format  ☐ General Education

1.3 General Education knowledge and skills area (if applicable): If none, check here X

☐ American History  ☐ Humanities  ☐ Other World Civilizations
☐ The Arts  ☐ Mathematics  ☐ Social Sciences
☐ Basic Communication  ☐ Natural Sciences  ☐ Western Civilization
2. Proposer Need Statement:

2.1 Describe why this course (or course revision) is needed to meet current or proposed goals and outcomes of the program or College, and, if a revision, provide an explanation of and justification for the revision. As an elective in the Sustainability Management program curriculum, this course will provide students with a foundation in conservation biology and insight into the intersection of the three pillars of sustainability: economic, social/human, and ecological, thus supporting their deepening knowledge and application of core program learning outcomes.

2.2 List the pre-requisite or co-requisite courses (taught within the home department or taught by another department) and explain their relationship to the proposed course. N/A

2.3 Explain the impact of this course in meeting the goals and outcomes of other Departments/programs (if any). If approved by a student's adviser, this course could serve as an elective for other, non-Sustainability Management students.

2.4 If the proposed course is designed to fulfill SUNY General Education Requirements, the Associate Provost for Instruction must review this proposal to ensure that General Education Requirements will be met for the specified knowledge area (See Instructions and Guidance). Please provide an explanation of how this course fulfills SUNY General Education Requirements. N/A

2.5 What are the staffing requirements (instructor, TA, Lab tech, etc.) for this course? If a new course, are there new staffing needs or are there adequate staff members already in place? If a revised course, are there additional staffing needs? A visiting instructor is needed.

2.6 What Department (or extra-Department) resources are or will be made available to support the course or course revision? ESF Open Academy Staffing are and will be available to support the course.

2.7 Anticipated Enrollment (enter where applicable)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>20</td>
</tr>
<tr>
<td>Spring Semester</td>
<td>20</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>20</td>
</tr>
</tbody>
</table>

2.8 Anticipated frequency of class meetings. N/A, this is an online course.
3. DETAILED COURSE DESCRIPTION

3.1 COURSE IDENTIFICATION AND FORMAT:

3.1.1 Course Prefix and Number: SUS 355
3.1.2 Course Name: Conservation Biology and Landscape Ecology
3.1.3 Credit Hours: 3
3.1.4 Semester (check all that apply): Fall ☒ Spring ☒ Summer ☒
3.1.5 Format (check as appropriate): Lecture ☐ Online ☒ Lab ☐ Field ☐

Other ☐ (explain)
3.1.6 Contact hours per week: Three hours per week
3.1.7 Prerequisite(s) – if none, please enter “None” (Be specific, as Upper Division courses and Graduate courses will likely have some pre-requisite knowledge) None

3.2 SCOPE:

3.2.1 Level of Instruction (check one, or two if a shared resource course):

   - Lower Division ☐
   - Upper Division ☒
   - Beginning Graduate ☐
   - Advanced Graduate ☐

3.2.2 Relation to curriculum or to other ESF or Syracuse University courses:
   a. Is this a required course? No ☒ Yes ☐
      If Yes, please list the program(s) for which it is a requirement:
   b. Is this an elective course within your department? No ☐ Yes ☒
   c. Is enrollment in this course restricted? No ☐ Yes ☒
      If Yes, please explain: There is priority for online students enrolled in the Sustainability Management B.S. program.
   d. Are other ESF or SU courses similar or identical to this course? No ☐ Yes ☒
      If Yes, please identify the courses: EFB 413
   e. Is this course a shared resource offering (i.e. is there a graduate or undergraduate concurrent offering)? No ☒ Yes ☐
      If Yes, what is the course number of the concurrent offering?

3.3 STUDENT LEARNING OUTCOMES:

Identify the student learning outcomes associated with this course.

At the completion of this course, students will be able to:

1) Identify threats to biodiversity and human livelihoods in the 21st century.
2) Describe biotic and abiotic patterns driving species richness and composition.
3) Identify connections between healthy ecosystems and human health.
4) Explain some of the main patterns of environmental changes like biodiversity loss, ecosystem degradation, and climate change.
5) Discuss the principles of sustainable development and biodiversity conservation, and critically examine efforts to create sustainable solutions that can protect biodiversity and eliminate poverty.
6) Use conservation biology problem-solving approaches and planning tools to interpret real-world examples of environmental problems.

7) Identify the current political and economic concerns of conservation, the actors involved, and their roles and methods in policy formation.

8) Use strategic examples from around the world to explain some of the challenges and practices of conservation.

9) Compare and contrast how differences in peoples’ backgrounds can affect how they impact and are impacted by environmental problems.

3.4 MAJOR CONCEPTS, PROCESSES or TOOLS:

Identify the course content and themes (e.g. Table of Contents) consistent with the learning domains and outcomes.

1. Biodiversity

2. The Crisis (e.g., extinctions, global threats such as human population growth, climate change, and balancing agriculture and conservation)

3. Conservation and human economies

4. Landscape ecology

3.5 INSTRUCTIONAL METHODS:

Identify the methods used to meet the course outcomes, as well as the principal instructional methods. This course will engage students in regular and substantive interaction among and between students and the instructor. This course is constructed on a weekly module basis that includes learning materials, learning activities, substantive interactions, and assessment and evaluation. Overall student course expectations include active and timely engagement with course materials and participation in all course learning activities each week. In each module, students will:

• Read and, in some cases, view course materials and resources (e.g., books, reports, articles, multimedia, videos);

• Write, e.g., discussion board / threaded discussion participation, reflection/reaction statements, position papers, analysis reports, journals or blog posts, reading summaries, case study assignments);

• Complete ungraded and graded assignments, e.g., problem sets, quizzes, exams, presentations, policy briefs, self-assessments, values clarification exercises, field work reports, project reports;

• Work individually and collaborate in small groups; and

• Communicate with the instructor and fellow students, sharing their perspective and providing constructive feedback through peer interaction and feedback.

There will be a cumulative project that will be worked on by students throughout the semester in addition to the methods listed above. The delivery of this course will take place primarily through the Blackboard learning management system.

3.6 CATALOG DESCRIPTION
Provide the course description using the precise format to be included in the ESF catalog (i.e. course number and title; format; brief description; semester(s) offered; and pre-/co-requisites). Please do not exceed 1000 characters. SUS 355 Conservation Biology and Landscape Ecology

Online

This course introduces essential concepts in conservation biology, focusing on a system that has created a global crisis for people, wildlife, and ecosystems. We will study the principles underlying older and newer approaches to conservation biology, as well as explore evidence that may illuminate when, and under what conditions, approaches to each may be successful. The paradigm is shifting towards the integration of human communities in the management and conservation of protected areas, and the valuation of ecosystem services. Innovative ways are needed to integrate human communities with conservation efforts, while adding value to ecosystem services. Through this lens we will assess the relationship of people and protected areas, investigate the role economics and politics plays in decision making, and debate the costs and benefits of a new paradigm shift away from traditional conservation.

Fall, with Spring and Summer as needed

Pre-requisite: None

Note: Enrollment in the Sustainability Management major, or permission of Sustainability Management program advisor is required.

3.7 COURSE HISTORY:

Provide the dates of prior approval of this course, and its revision history. N/A

3.7.1 Relationship to current ESF courses

This course is replacing a current ESF course ☒ YES ☐ NO

If NO, then proceed to section 4 below.

If YES, then provide below the number and name of the course to be deactivated and removed from the catalog once this course proposal has been approved:

Course Number (of the course to be replaced)
Course Name (of the course to be replaced)

If the course to be replaced is used by departments other than the department sponsoring this proposal, please indicate below which departments are affected and the date they were notified about the course replacement.

Department: Date of Notification:
Department: Date of Notification:
Department: Date of Notification:
Department: Date of Notification:
4. Institutional Impacts:

This section pertains to forecasting institutional resource needs to support the course or course revision. Provide clear statements regarding the needs and current availability (or absence) of resources. Note that, if this is a course revision, only the impacts of the revision should be included.

Staffing needs: Visiting instructor needed

Classroom resources (e.g. physical facilities in a laboratory, lecture hall, flexible space, academic computing): N/A

Technology Resources: Blackboard Learning Management System is already in place

Computing Resources (software licensing, hardware, access): ESF Computer and Network Services (e.g., Office 365, E-mail), Blackboard is already in place

Library Resources (subscriptions, services): Existing support, resources, and access for off-campus students

Transportation Requirements (budget, fees, fleet vehicles): N/A

Forest Properties or Field Practicum Facilities: N/A
5. Health and Safety Considerations:

Will any of the conditions or situations outlined below be present in association with the course? Yes / No

5.1. Will substances with any of the following properties be used during instruction: flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury? □ / ☒

5.2. Will any physical hazards be present during instruction? (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.). □ / ☒

5.3. Will any biological hazards be present during instruction? (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.). □ / ☒

5.4. Will any radiation hazards be present during instruction? (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.). □ / ☒

5.5. Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction? (Give considerable thought to electrical use outdoors, or any potentially wet location.). □ / ☒

5.6. Will there be any personal safety issues related to the class? (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.). □ / ☒

5.7. Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise? □ / ☒

5.8. Will any type of personal protective equipment be necessary during class exercises? (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.) □ / ☒

If the answer was “Yes” to any of the HEALTH AND SAFETY questions, please explain:

For lab and field courses to which all answers are “no”, you should explain that here, also. Normally, we would expect some safety precautions for such courses. N/A
6. Coordination and Consultation

Emails/letters, as noted below and attached to this proposal, or signatures below, indicate that the affected departments, programs or units have been notified of this proposal and have had an opportunity to assess the impact of the proposal on their respective units.

Affected Academic Department(s) or Program(s) – other than the sponsoring department:

Open Academy - Sustainability Management

Tondelaya George

Name of Chair/Program Director

________________________________________

Chair Signature

Date

Department/Program 1

Department/Program 2

Department/Program 3

[If more than three Departments/Programs, please continue on a separate page]

Other Units:

Associate Provost for Instruction & Dean of the Graduate School (for Gen Ed courses only)

Date

Registrar

Date

Library Director

Date

Computing and Network Services

Date

Physical Plant

Date

Forest Properties

Date

Environmental Health and Safety

Date
7. Proposer Information and Sponsoring Department Chair Affirmation:

Contact Person:

Name: Tondelaya George  Department: Open Academy
Email: tkgeorge@esf.edu  Phone: 315-470-6810

This proposal has been reviewed and approved by the sponsoring Department. Affected departments have been notified and given the opportunity to provide feedback. Department resources are or will be made available to support the course, or a plan is in place to meet the resource needs as identified in the Institutional Impacts section of this proposal (see Section 4, above).

Name: Tondelaya George  Date: 1/5/21
Department Chair (or designated curriculum representative)

Signature: Tondelaya K. George  Or letter attached □
Department Chair (or designated curriculum representative)

8. Approvals:

__________________________________________________  __________________
Curriculum Committee  Date

__________________________________________________  __________________
Faculty Governance  Date

__________________________________________________  __________________
Provost  Date