1. Course Information:

1.1 Course Prefix and Number: EST 674
   Course Title: Advanced Interpretation and Environmental Education
   (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 ☒

☐ 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. This course has been taught experimentally as EFB and EST 696. We wish to formalize it. EST 674 is an important course for graduate students in Environmental Education and Interpretation; the course will be open to other graduate students as well. This course proposal incorporates professional development standards outlined by the National Association for Interpretation, and the North American Association for Environmental Education.

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. EST 570 Intro to Personal Environmental Interpretation Methods is a pre-requisite and provides foundational, basic definitions, theory and practical skills in the professions of Environmental Education and Interpretation (EE&I). The proposed course, EST 674, Advanced Interpretation and Environmental Education, goes deeper into each field's theory, research, and practice, and can result in certification as a Certified Interpretive Guide by the National Association for Interpretation.

2.3 Explain the impact of this course in meeting the goals and outcomes of other Departments/programs (if any). Other Departments and Programs (e.g., EFB and SRM) may use this proposed Advanced Interpretation and Environmental Education course as a directed elective in communications, social science, or methods.

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? Tenure-stream professor will staff this course. If TA resources are available, they would be very helpful in assisting with the intensive assignments, some of which are done in conjunction with community partners (i.e. DEC, NYS Parks, local parks and nature centers, zoos, historical museums).

2.6 What Department (or extra-Department) resources are or will be made available to support the course or course revision? Environmental Studies provides the staffing support

2.7 Anticipated Enrollment (enter where applicable)

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<tr>
<th>Semester</th>
<th>Enrollment</th>
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<tr>
<td>Fall Semester</td>
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<td>Summer Semester</td>
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<td>Spring Semester</td>
<td>10</td>
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</tbody>
</table>

2.8 Anticipated frequency of class meetings. once per week; 3 hours
3. DETAILED COURSE DESCRIPTION

3.1 COURSE IDENTIFICATION AND FORMAT:

3.1.1 Course Prefix and Number: EST 674
3.1.2 Course Name: Advanced Interpretation and Environmental Education
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: 3
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) EST 570 and graduate status; or permission of instructor

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:
   d. Are other ESF or SU courses similar or identical to this course? No ☐ Yes ☒.
      If Yes, please identify the courses:
   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? EST 474

3.3 STUDENT LEARNING OUTCOMES:

Identify the student learning outcomes associated with this course.

After completing this course, the student will be able to:

• Reflect critically upon the evolution of the fields and of Environmental Education and Interpretation, including key principles of early thought-leaders, as compared with present-day diversity, equity and inclusion principles.

• Practice exemplary interpretation and environmental education methods, as a professional

• Provide facilitative leadership for an undergraduate team and community partner, engaging in full cycles of planning and implementation of interpretation and environmental education programs for diverse, real-world audiences (including content research on resources; audience
analysis; preparation of program themes, objectives, content; relating program content to mission and outcome objectives of community partners)

• Practice diverse formal and informal instructional methods within interpretation and environmental education, after conducting audience analysis and engaging authentically with community partners

• Use assessment/evaluation methods suited to the instruction content and settings within the semester’s assignments

• Demonstrate critical reading skills in relation to current peer-reviewed research findings in EE&I and related journals

• Prepare a research-based case study and facilitate undergraduate dialogue around critical issues such as climate change education

• Fulfill all requirements to earn the Certified Interpretive Guide credential from the National Association for Interpretation, should the student choose to complete an application do so.

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.

- Environmental Education and Interpretation over Time: Thought Leaders and Diversity, Equity and Inclusion

- Review of Interpretation Theory, Principles, Methods

- Critical reflection on thought leaders and research within Environmental Education and Interpretation

- Audience analysis for interpretation

- Knowing resources for interpretation

- Interpretive Program Design, Development and Implementation

- Review and advanced work in Environmental Education Lesson Planning, Program Design and Implementation

- Facilitated Leadership of Community Engagement for Environmental Education and Interpretation

- Managing sites and supervision

- Preparation and facilitation of case studies in critical issues in Environmental Education and Interpretation: Climate change and science education; Decolonization and Diversity, Equity and Inclusion
3.5 INSTRUCTIONAL METHODS:

Identify the methods used to meet the course outcomes, as well as the principal instructional methods. This advanced graduate course is highly interactive. Participants will present, in seminar/workshop style, their interpretive programs to peers for review. In addition, environmental education/interpretation programs will be designed by student teams working alongside partners, as students practice authentic community engagement in real-world assignments. Graduate students will serve as facilitative leaders for this community engaged work, and will prepare case studies for the whole class, using peer-reviewed literature and curricula related to critical issues such as climate change education. The culminating assignment is to deliver a program within a partner's setting (nature center, park, historical site, gardens, or other field location). Interpretation learning experiences will follow the guidelines for students to be able to obtain the Certified Interpretive Guide credential from National Association for Interpretation.

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.

Three hours of lecture, discussion, and practical exercises per week. This course provides in-depth experience in planning and implementing environmental education and interpretation (EE&I) programs. Students may receive their Certified Interpretive Guide credential from the National Association for Interpretation. Learners will serve as facilitative leaders for team engagement with EE&I community partners, such as parks, nature centers, zoos, non-profit organizations and historical sites. With these partners, students will design and offer EE&I programs and lessons. Students will prepare case studies to present advanced readings from the research-based literature regarding critical challenges in EE&I, including climate change education, and diversity, equity, and inclusivity in EE&I. Prerequisite(s): EST 570 and graduate standing; or permission of instructor. Note: Credit will not be granted for both EST 474 and 674. Spring.

3.7 COURSE HISTORY:

Provide the dates of prior approval of this course, and its revision history.
- This course has previously been taught experimentally as EFB and EST 696

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.

<table>
<thead>
<tr>
<th>Staffing needs:</th>
<th>None</th>
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<tr>
<td>Classroom resources (e.g. physical facilities in a laboratory, lecture hall, flexible space, academic computing):</td>
<td>Classroom with space for interactive activities (movable chairs, tables/desks)</td>
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<tr>
<td>Technology Resources:</td>
<td>None</td>
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<tr>
<td>Computing Resources (software licensing, hardware, access):</td>
<td>None</td>
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<tr>
<td>Library Resources (subscriptions, services):</td>
<td>Numerous reference textbooks will be placed on reserve</td>
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<tr>
<td>Transportation Requirements (budget, fees, fleet vehicles):</td>
<td>Fleet vehicles and entry fees required for local field trips</td>
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<tr>
<td>Forest Properties or Field Practicum Facilities:</td>
<td>Fieldwork will be done at partner locales off campus</td>
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</table>
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. No specialized concerns. Students’ field experiences will be limited in scope and in terms of equipment used. Only the most basic field equipment will be used in students’ exercises as they teach in an Environmental Education or Interpretation context.
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:**

<table>
<thead>
<tr>
<th>Department/Program 1</th>
<th>Name of Chair/Program Director</th>
<th>Chair Signature</th>
<th>Date</th>
<th>Or letter attached □</th>
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<th>Chair Signature</th>
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<th>Department/Program 3</th>
<th>Name of Chair/Program Director</th>
<th>Chair Signature</th>
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*If more than three Departments/Programs, please continue on a separate page*

**Other Units:**

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<tr>
<th>Associate Provost for Instruction &amp; Dean of the Graduate School (for Gen Ed courses only)</th>
<th>Date</th>
<th>Or letter attached □</th>
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7. Proposer Information and Sponsoring Department Chair Affirmation:

Contact Person:

Name: Shari Dann Department: Environmental Studies

Email: slsand@esf.edu Phone: 517-420-4301

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: Benette Whitmore Date: 2/XX/2021

Department Chair (or designated curriculum representative)

Signature: Or letter attached □

Department Chair (or designated curriculum representative)

8. Approvals:

_________________________ ____________________________
Curriculum Committee Date

_________________________ ____________________________
Faculty Governance Date

_________________________ ____________________________
Provost Date