# Project Dragonfly Core Courses: Themes, Topics, and Assignments

The following is provided to exhibit the topics, themes, and assignments in Project Dragonfly’s required Core web-based courses. The main goal of this document is to provide information about each course, identify connections between and amongst course themes, and to encourage creativity in addressing new topics that are relevant to conservation and education.

NOTE: Below reflects the Dragonfly core curriculum starting in Fall 2020. This shift maintains the same total number of credit hours but simplifies the student experience by reducing the need to manage multiple courses at smaller credit-hour amounts. Prior to Fall 2020, there were seven core courses that were 2 credits each (14 credits total). Now, there are four courses at 3-credits each and one course at 2 credits (14 credits total). For the new curriculum, the content of "Issues in Biodiversity" has been absorbed into the “Conservation Science & Community” and “Biology in the Age of Technology” courses. The previous “Leadership in Science Inquiry” and “Professional Media Workshop” courses are now contained in the renamed "Science Leadership & Media Workshop."

For students that are mid-sequence: ALL credits you have already earned will count towards the 35 credits required for graduation. For those in need of 1 or 2 credits who started before Summer 2020, we will work with you on alternative course options that will fit your sequence.

<table>
<thead>
<tr>
<th>Conservation Science &amp; Community (CSC)</th>
<th>Biology in the Age of Technology (BAT)</th>
<th>Issues in Evolution (IEV)</th>
<th>Science Leadership &amp; Media Workshop (SLMW)</th>
<th>Master’s Capstone (CAP)</th>
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<tbody>
<tr>
<td>Credits – Semester</td>
<td>Fall</td>
<td>Spring</td>
<td>Fall</td>
<td>Spring</td>
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<td>Overall Theme</td>
<td>Current &amp; foundational issues in conservation science with a focus on community engagement.</td>
<td>Applications of technology in addressing complex biological issues and in engaging the public in solutions.</td>
<td>Current &amp; foundational issues in evolution &amp; education. Online discussions allow for in-depth discussion / understanding of the complexity of the issues.</td>
<td>Writing and publication as an outlet for expressing ideas and influencing a field of practice. Understanding how authorship contributes to professional and personal development.</td>
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| **Skills Developed** | - Accessing, reading scholarly articles  
- Web-based discussion  
- Community engagement methods  
- Peer Review | - Web-based discussion  
- Peer review  
- Using technology as an outreach / engagement tool | - Drawing major themes & concepts from scholarly articles.  
- Web-based discussion and facilitation  
- Relating concepts to professional environment | - Increase overall skills & confidence in writing & research  
- Methods for providing meaningful peer feedback / editing | - Personal reflection  
- Confidence in writing & synthesizing multiple topics in a comprehensive summary  
- Providing meaningful peer feedback |
| **Details of themes / topics** | - Understanding conservation values & participatory action methods  
- Human-wildlife conflicts  
- Global & landscape approaches to conservation | - Technology & nature deficit  
- Technology & conservation and wildlife management  
- Using social media and technology for conservation education | - Evolutionary Theory  
- Adaptation and natural selection vs. plasticity  
- Sexual selection, kin selection, and altruism  
- Speciation  
- Human evolution | - Ethics in research & publishing  
- Building a publication project  
- Identifying venues for publication  
- Strengthening ideas in writing and project creation | - Analyzing & reflecting on personal experience and new understandings gained  
- Reflections as a learning community |
| **Assignment Overview** | **Community Engagement Toolkits:** Empowers students to learn more about their communities (broadly defined) by engaging them in participatory techniques | **Eco-Spot:** Using a technology based media tool (e.g. podcast, blog) students present a social or ecological issue to a chosen audience in a way that requires/inspires active engagement. | **Final Project:** Students demonstrate an understanding of course topics by connecting core themes to a project that is personally/professionally relevant:  
1) lesson plan  
2) review paper  
3) infographic | **Manuscript/Project for Publication:** By the end of the course each student will present & submit a final manuscript/media project to a chosen publication venue.  
*Note:* Evidence of submission of the PMW Leadership Challenge is a requirement for graduation. | **Portfolio:** Provides a solid, comprehensive representation of a student’s master’s experience connecting projects with descriptive/reflective narrative; illustrates how their work has brought about change in local, national and int’l contexts. |