Tour: Environmental Exploration

Tour Topic: Vizcaya’s Natural Environment

Tour Theme: How have Vizcaya’s natural communities been adapted and preserved?

Grade Levels: 9th–12th grades

Location: Gardens and Main House

Understandings:
- Students will understand the purpose of Vizcaya has changed over time (private home to public museum).
- Students will understand the concept of preservation as it applies to natural environments and inside the house, and the role of a museum.
- Students will understand how Vizcaya’s creators supported environmental preservation through landscape development and design throughout Miami.
- Students will understand the nature of epiphytes, halophytes and glacophytes.
- Students will understand the environmental impact of the Mangrove Shore.
- Students will understand how Biscayne Bay and Miami have changed over time and the impact on Vizcaya.
- Students will understand that climate factors affect Vizcaya’s natural environments and the world they live in.
- Students will understand the purpose of select rooms and areas on the first and second floors of the Main House.
- Students will understand that Vizcaya was created by a team of people and the role of each one: James Deering, Paul Chalfin, F. Burrall Hoffman, and Diego Suarez.
- Students will understand that Vizcaya is designed in the style of an Italian country home, with specific innovations and inspirations taken from its Miami location.
- Students will understand the relationship of the Main House to the outdoor environment.

Essential Questions:
- What are the challenges of preserving the natural environment in an urban area?
- Who is responsible for preservation efforts?
- What is the value of exploring how plants grow and thrive and become endangered or extinct?
- How are natural landscapes and environments interdependent?
- How does the natural environment affect my daily life and future?
- What can we learn from exploring a historic home?
Knowledge:
- Students will know the various environments on the grounds of Vizcaya: rockland hammock (native forest), mangrove shore, formal gardens.
- Students will know that preservation is a central value to the museum and choices that have been made in the past and present to support environmental preservation.
- Students will know the difference between epiphytes, halophytes and glacophytes.
- Students will know the origins of select plants and trees at Vizcaya.
- Students will know the benefits of native plants in a landscape.
- Students will know that mangroves are directly related to protecting areas against factors of climate change.
- Students will know that there are many time periods represented at Vizcaya: the distant past, the recent past (Deering era), and the present.
- Students will know that museums play a crucial role in preservation of ideas and material culture.
- Students will know which characteristics of Vizcaya’s gardens are inspired by European design
  and which characteristics are inspired by its sub-tropical location and environment.
- Students will know that preservation and conservation issues apply to architecture and well as the environment.

Skills:
- Compare and contrast.
- Determine part to whole relationships.
- Define and apply: epiphytes, halophytes and glacophytes.
- Read an historical article.
- Develop supported observations.
- Consider multiple possibilities.
- Apply outside knowledge to thematic discussions.
- Active listening.

Instructional Strategies:
- Classroom lessons provided by Vizcaya Museum and Gardens and led by classroom teacher.
- Object and image-based discussions during field study and classroom lessons provided by Vizcaya.
- Inquiry-based facilitated discussions during field study and classroom lessons provided by Vizcaya.
- Guided tour of gardens during field study.
- Guided tour of Main House during field study.

Note to Educators:
- The field study will take place rain or shine. Comfortable shoes and casual clothes are suggested.
- All school tour facilitators are specifically trained and certified by Vizcaya Museum and Gardens to work with school audiences.
- During the guided tour students will have the opportunity to consider many different kinds of questions, and we welcome many responses. We do this to encourage thinking skills. We ask that you allow students time to consider and to respond to these questions.
- Guided tours often include the use of technical vocabulary, carefully selected to support the tour’s curricular goals. During the guided tour students will have the opportunity to hear new vocabulary and to work as a group to consider meaning. This is an opportunity for students to use context clues
to understand unique and unfamiliar terminology. We ask that you allow students time to puzzle through new vocabulary, as facilitated by the tour leader.

- This guided tour may include a reproduction of archival resources and/or quotes regarding the history of Vizcaya. During the guided tour students may have the opportunity to read independently and aloud. As archival and historical resources they may be difficult to decipher or contain unfamiliar vocabulary—and this is the point. This is an opportunity for students to use context clues to read and understand unique and unfamiliar documents. We ask that you allow students time to puzzle through their reading, as facilitated by the tour leader.

- The above experiences allow educators the opportunity to observe their students and to consider how learning in the school classroom is applied and expanded upon in a new learning environment.

Florida Standards for Field Study:

<table>
<thead>
<tr>
<th>Florida Standard</th>
<th>Florida Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA.912.C.3.4</td>
<td>SC.12.L.17.4</td>
</tr>
<tr>
<td>VA.912.C.3.6</td>
<td>SC.12.L.17.8</td>
</tr>
<tr>
<td>VA.912.H.1.1</td>
<td>SC.12.L.17.16</td>
</tr>
<tr>
<td>VA.912.H.1.9</td>
<td>SC.12.L.17.17</td>
</tr>
<tr>
<td>VA.912.F.2.8</td>
<td>SC.12.L.17.20</td>
</tr>
<tr>
<td>SS.912.A.1.1</td>
<td>LAFS.910.RH.1.1</td>
</tr>
<tr>
<td>SS.912.A.1.2</td>
<td>LAFS.910.RH.1.2</td>
</tr>
<tr>
<td>SS.912.G.2.1</td>
<td>LAFS.910.RH.1.3</td>
</tr>
<tr>
<td>SS.912.G.5.4</td>
<td>LAFS.910.RH.2.4</td>
</tr>
<tr>
<td>SS.912.G.5.6</td>
<td>LAFS.910.RH.3.9</td>
</tr>
<tr>
<td>SS.912.W.1.3</td>
<td>LAFS.1112.RH.1.1</td>
</tr>
<tr>
<td>SS.912.W.1.6</td>
<td>LAFS.1112.RH.1.2</td>
</tr>
<tr>
<td>SS.912.H.2.5</td>
<td>LAFS.1112.RH.2.4</td>
</tr>
<tr>
<td>SS.912.S.7.4</td>
<td>LAFS.1112.RH.2.5</td>
</tr>
<tr>
<td>SS.912.S.8.9</td>
<td>LAFS.1112.RH.3.7</td>
</tr>
</tbody>
</table>

Lesson Plan Format Based On: Understanding by Design