

COURSE TITLE: CARIBBEAN NATURE-BASED ECOTOURISM & CONSERVATION SCIENCE

COURSE NUMBER: SC417s, SC517s

**NO. OF CREDITS: 4 QUARTER CREDITS
(semester equivalent = 2.66 credits)**

**WA CLOCK HRS: 40
OREGON PDUS: 40**

**INSTRUCTORS: CHANT THOMAS, M.S.
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TRAVEL DATES: Arrive: December 26, 2013 Depart: January 1, 2014

COURSE DESCRIPTION:

Study the history and impacts of Riviera Maya tourism on the Caribbean coast of Mexico's Yucatan Peninsula and the Sian Ka'an UNESCO Biosphere Reserve. Examine the potential of nature-based ecotourism and conservation science to re-shape the tourism industry into a form that would protect the natural features and the indigenous people of this spectacular region. Explore the historic ruins of Tulum, kayak to mangrove islands in a birding paradise. Motor launch up a pristine river, and float back down an ancient Mayan canal. Participate in beach clean-up where sea turtles nest. Visit cenotes, where daylight reaches the vast underground lakes and rivers of the Yucatan. Our base will be Cesiak Ecologico Centro, a small ecotourism and environmental education center located on white sand Caribbean beaches of Sian Ka'an.

This course is appropriate for teachers of all grades who seek skills in observation, investigation and interpretation of nature-based ecotourism, which is so important in the Pacific Northwest. Humanities teachers in Middle and High Schools will find this course valuable to inform their teaching of reading, writing, history, and social studies with connections to the ecological and environmental sciences.

For more information, see the separate document **SUPPLEMENTARY MATERIALS**.

LEARNING OUTCOMES:

As a result of this course, participants will:

1. Become aware of how industrial tourism can damage the natural world and the local people.
2. Experience the methods and realize the goals of nature-based ecotourism and conservation science.
3. Increase their knowledge and understanding of Caribbean natural history and Mayan culture.

COURSE REQUIREMENTS:

Following are the general requirements weighted for determining the granting of university credit. Antioch University Seattle requires 75% or better to issue credit at the 400 level and 85% at the 500 level.

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| 1. Attendance and active participation in all class sessions | 40% |
| 2. Required reading | 30% |
| 3. Satisfactory completion of all outside assignments | 30% |

400 & 500 LEVEL ASSIGNMENTS:

Prior to the Trip

1. Contact instructor directly to choose reading selections from the Supplementary Materials. (separate document)
2. Read the selections, creating notes for yourself to inform later discussions and to submit as written work. Read any other Internet sources of guidebooks for natural history of the Yucatan Caribbean.

During the Trip

3. Keep a daily journal of your activities and reflections. This is the most important written assignment - please give it the weight it deserves.

During or After the Trip

4. Develop a list of three discussion topics appropriate to your teaching assignment that are informed by your learning on this trip (list books, websites, and other resources as appropriate).

500 LEVEL ASSIGNMENTS:

In addition to the 400 Level Assignments, complete **one** of the following:

5. Develop a website that includes photographs and reflections from the trip
6. Based on observation, reading, and research from at least 3 sources, produce a 3-5 page paper on a cultural or historical figure that pertains to your trip; include a Bibliography of your references.

ASSIGNMENT FORMAT & DUE DATES:

- Papers should be typed using size 12 font and double spacing
- Assignments should be sent in the body of an email or as attachments
- Assignment 1 is due as soon as possible after you register
- Assignment 2 is due 2 weeks prior to departure
- Assignments 5-7 & 500 Level are due during the trip or within 2 weeks after return
- Please send photocopies of at least 5 journal pages.

MATERIALS FEE:

None

REQUIRED READING

All readings are available on the Internet. Participants will choose a selection of readings from the internet-based bibliography with the instructors and read them prior to the trip. During the course, discussion sessions will feature participant reports on various reading selections. Lists, links, and details of reading selections are contained in the **Annotated Bibliography** in the Supplementary Materials document.

PROGRAM COST:

Estimated to be \$600 to \$800, which includes:

- Guide and transportation for 4 cultural and natural history excursions (kayak, motor launch, van)
- Dakubetede Environmental Education Programs fees, including university quarter credit of hours, travel logistics and advice, lodging and ground transportation reservations.
- See Supplementary Materials for additional participant expenses.

INSTRUCTOR EVALUATION OF WORK:

Please contact the instructors via email if you would like to receive comments on your work.

QUALIFICATIONS FOR TEACHING:

Chant Thomas, M.S., holds a M.S. in Environmental Education from the Department of Biology, Southern Oregon University, Ashland, OR, and a B.S. in Earth Science (minor in Theatre) from University of California, Santa Cruz. Chant's background as an educator ranges from teaching a multi-grade class in a remote one-room schoolhouse to designing and teaching forestry, biology, and geography courses at Southern Oregon University. Chant is founder and director of Dakubetede Environmental Education Programs (D.E.E.P.).

Susanna Bahaar, M.A., holds a Master of Arts in Education from Southern Oregon University, Ashland, OR and both a B.F.A. and B.A. from Alfred University, Alfred, N.Y. Her areas of expertise include Spanish fluency, the fine arts, psychology and eco-psychology, master gardening techniques, herbal medicine, and vegetarian cookery. Susanna worked for over 20 years in the Medford School District where she taught high school and middle school Fine Arts, Spanish, language arts, math and social sciences. Prior to teaching, Susanna traveled widely, gaining experience living and creating art in foreign cultures.

Today Susanna and Chant host and facilitate programs for Dakubetede Environmental Education Programs at Birch Creek Arts and Ecology Center, located on their historic wilderness homestead Trillium Farm.

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BIBLIOGRAPHY

NATURAL HISTORY SECTION

Centro Ecologico Sian Ka'an (CESIAK). *Facts of Sian Ka'an UNESCO World Heritage Biosphere Reserve:* www.cesiak.org/aboutsiankaan.htm (accessed 01/2013).

CESIAK provides statistics and basic information about the Sian Ka'an Biosphere Reserve, including size, weather, natural history, management, visitation, history of protection, and more.

Centro Ecologico Sian Ka'an (CESIAK). *Dune Restoration Nursery at Cesiak.*

www.cesiak.org/nursery.htm (accessed 01/2013).

Cesiak provides an introduction to the Dune restoration Nursery in Tulum and two sites in Sian Ka'an. Information includes how the nursery provides plants used in coastal dune restoration, including projects with children as part of their education programs.

Centro Ecologico Sian Ka'an (CESIAK). *Flora of Cesiak.* www.cesiak.org/flora.htm (accessed 01/2013).

Cesiak provides photographs and descriptions of several of the common plants occurring on the its campus.

Centro Ecologico Sian Ka'an (CESIAK). *Habitats found in Sian Ka'an UNESCO World Heritage Biosphere Reserve.* UNESCO. www.cesiak.org/habitat.htm (accessed 01/2013).

Cesiak provides photographs and descriptions of the dozen most common terrestrial and aquatic wildlife habitats in Sian Ka'an.

UNESCO (United Nations Educational Scientific and Cultural Organization). *Description of Sian Ka'an.* UNESCO. <http://whc.unesco.org/en/list/410> . Accessed 12/2012.

This site provides a more in-depth description of Sian Ka'an than the facts page on the Cesiak site. Scroll down to "Long Description" where UNESCO also provides an expandable list of their Red-Listed Species.

UNESCO. *Video of Sian Ka'an.* UNESCO. <http://whc.unesco.org/en/list/410/video> . Accessed 12/2012.

In this short video, UNESCO provides a beautiful introduction to Sian Ka'an with aerial photography and a diving expedition into cenotes and underground rivers.

CONSERVATION SCIENCE SECTION

Garpow, Joan Wendy. *A New Option for Protected Areas in Mexico's Mayan Riviera? A Case Study of the SUMA* Program in Akumal.* Department of City and Regional Planning, University Center for International Studies, University of North Carolina, Chapel Hill. Carolina Papers: International Development No.1, Spring 2001. Accessed 12/2012:

http://cgi.unc.edu/uploads/media_items/a-new-option-for-protected-areas-in-mexico-s-mayan-riviera.original.pdf

This paper investigates some of the issues facing the conservation of the Mayan Riviera's unique natural resources in light of a booming tourism industry.

Hausman, Heidi. *Development in Tulum, Mexico: Considering Water Quality and Subaqueous Cave Locations.* Nicholas School of the Environment, Duke University, Durham, NC., 2009. Accessed 12/2012: http://www.oztotl.com/ps/reports/Development_in_Tulum.pdf.

Development is occurring rapidly along the Mayan Riviera in the Yucatan Peninsula, Mexico with little regard to environmental regulations or wellbeing. In particular, fresh water must be considered when planning for future development.

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BIBLIOGRAPHY

ECOTOURISM SECTION

Hacienda Tresrios. *Riviera Maya Airport: Terminal or Takeoff?*, Hacienda Tresrios, Playa del Carmen, MX. 2010. Accessed 02/2013:

<http://www.haciendatresrios.com/news-and-events/riviera-maya-airport-project-terminal-or-takeoff/>

This brief article describes the history and the pros and cons of the proposed major new airport outside of Tulum.

Magali, Oriol Daltabuil, et al. *Tourism Development in Quintana Roo, Mexico*, Cultural Survival Quarterly, March 2010, Cambridge, MA. Accessed 02/2013:

<http://www.culturalsurvival.org/ourpublications/csq/article/tourism-development-quintana-roo-mexico>

This essay is an outgrowth of Cultural Survival's work in Quintana Roo on the impact of tourism on the Maya communities of this previously very remote Yucatecan region.

Magnoni, Aline, et al. *Tourism in the Mundo Maya: Inventions and (Mis)Representations of Maya Identities and Heritage*. Tulane University, New Orleans, LA. 2009. Accessed 02/2013:

http://www.academia.edu/2460619/Tourism_in_the_Mundo_Maya_Inventions_and_Mis_Representations_of_Maya_Identities_and_Heritage

This paper explores how Maya identities have been (mis)represented in the context of heritage tourism across the Mundo Maya and underscores the cultural heterogeneity and historical diversity of Maya speaking people.

Meyer-Arendt, Klaus J., *The Costa Maya: Evolution of a Touristic Landscape*, Études caribéennes [En ligne], 13-14 | Décembre 2009, mis en ligne le 29 juin 2010, consulté le 02 mars 2013.

<http://etudescaribeennes.revues.org/3867>. in English. Accessed 03/2013.

Only 50 years ago, Quintana Roo (then a territory, since 1974 a state) was described as "Mexico's Empty Quarter" by geographer Clinton Edwards (1957).

Molina, Concepcion, et al. *Guidelines for Low-Impact Tourism along the Coast of Quintana Roo, Mexico*. Amigos de Sian Ka'an, Cancun, MX. 2001. Accessed 02/2013.

http://rmportal.net/library/content/aquatic_marine_coastal_zone/nor_0036.pdf

Several initiatives have emerged in recent years that reaffirm the importance of conservation of our coastal zone.

Torres, Rebecca. *Cancun's Tourism Development from a Fordist Spectrum of Analysis*. East Carolina University, Greenville, NC. 2002.

http://www.sagepub.com/mcdonaldizationstudy5/articles/Leisure%20and%20Tourism_Articles%20PDFs/Torres.pdf

Tourism scholars in recent years have posited a global paradigmatic shift from Fordist to more post-Fordist and neo-Fordist modes of tourism production and consumption. "Fordist" refers to the mass produced, mass advertised, assembly line mode of tourism as exemplified by Cancun and recent development along the Riviera Maya.

Vidal, Omar. *Strengthening Policy Tools to Achieve Integrated Coastal Management*. World Wildlife Fund Mexico Program Office, Mexico City. 2004. http://pdf.usaid.gov/pdf_docs/PDACA238.pdf

Costa Maya, the focus area, lies in the southern part of the state of Quintana Roo along the Mexican Caribbean. It is one of World Wide Fund for Nature's (WWF) highest international priorities for conservation and is threatened by rapidly expanding interest on the part of multinational developers.

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PROPOSED ITINERARY

Course Itinerary is subject to change.

DAY 1: Travel Day - Dec. 26, 2013

Arrive at Cesiak Ecologico Centro by 6 p.m. Check in; meet instructors; have dinner; settle into Cesiak.

DAY 2: Friday Dec. 27:

Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): Review syllabus, assign written work, introduction to Cesiak & staff, an eco-tourism destination. Tour focusing on Cesiak history, education and conservation programs (turtles, etc), alternative energy, dune restoration, botany, intro to Sian Ka'an, walk to dock, view map of Laguna. Lunch at 1:00. Afternoon session: Discussion of readings, plan week, free time.

DAY 3: Saturday Dec. 28:

Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30): In-depth Natural History of Cesiak: botany, birding, reptiles and amphibians, dune restoration with Ana and Chant. Lunch at 1:00. Afternoon session: Guided discussion, review, journaling. Relax on beach. Susanna's optional Margarita Spanish class before dinner. Dinner at Cesiak, free time.

DAY 4: Sunday Dec. 29:

Early morning excursion (taxi vans) to Tulum ruins with lecture on history of Tulum including Caste Wars & Maria Uicab, queen of Tulum. Restaurant lunch in Tulum Pueblo. After lunch: Excursion to Pet Cemetery cenote. Return for Susanna's optional Margarita Spanish class before dinner at Cesiak, followed by review and discussion.

DAY 5: Monday Dec. 30:

Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30) Sian Ka'an Natural History: split group in half with kayak & motor launch trips. Afternoon session: morning kayakers take launch trip and visa versa. Susanna's optional Margarita Spanish class before dinner. Dinner at Cesiak, followed by review and discussion.

DAY 6: Tuesday Dec. 31

Optional morning Yoga on the beach with Susanna before breakfast. Morning session (9:30) Discussion of eco-tourism in Tulum: federal versus state plans, benefits and impacts of present and planned levels of eco-tourism (economic, cultural, environmental). Afternoon session: Conservation volunteerism beach clean-up. Summary discussions, journaling, written work review, final wrap-up. Afternoon free time to relax on beach, optional shopping in Tulum. Susanna's optional Margarita Spanish class before dinner. Farewell dinner, good-byes. Optional New Year's Eve in Tulum.

DAY 7: Wednesday Jan. 1

Farewell breakfast. Pack up, check out, and catch ground transportation to Cancun Airport.

NOTE: Participants are encouraged to come to the Tulum-Sian Ka'an area early, before the course, and/or stay later in the area to enjoy the local culture and natural beauty. Instructors can assist participants in locating lodging in the "boutique" beach town of Tulum, the northern gateway to Sian Ka'an.