RECORD OF ACADEMIC ACHIEVEMENT

The Evergreen State College - Olympia, Washington 98505

OFFICIAL TRANSCRIPT DOCUMENT

Ortega-Owen, Zoe A — A00420052

Last, First Middle — Student ID

DEGREES CONFERRED:

Bachelor of Science — Awarded 10 Jun 2022

TRANSFER CREDIT:

Start	End	Credits	Title
09/2017	06/2019	45	**South Puget Sound Community College**
09/2017	06/2019	1	**South Puget Sound Community College**

EVERGREEN UNDERGRADUATE CREDIT:

Start	End	Credits	Title
09/2019	06/2020	48	**Irrepressible Bodies: Hope, Health, and Resilience in a Turbulent World** *8 - Human Biology: Introduction to Anatomy and Physiology with Lab* *5 - Introduction to Governance and Government Studies* *4 - Introduction to Public Health* *4 - Public Health: Introduction to Epidemiology* *4 - Introduction to Community Studies* *3 - Introduction to Nutrition and Nutritionally-Related Diseases* *3 - Introduction to Health Education* *2 - Health Education Project: Children's Book* *3 - Critical Health Literacy: Social Justice, Race and Dis/Ability Studies* *2 - Pandemic Academy: Interdisciplinary Perspectives on COVID-19* *4 - Practice of Critical Thinking* *2 - Analytical Thinking and Writing* *4 - Foundations of College Success*
03/2020	06/2020	4	**Health vs. Wealth** *4 - Public Health*
06/2020	09/2020	16	**Doula Training** *16 - Independent Learning Contract: Doula Training*
09/2020	06/2021	38	**Integrated Natural Sciences** *4 - General Biology: Evolution and Ecology* *5 - General Biology: Molecular and Cellular Biology* *3 - General Biology: Animal Physiology* *3 - General Biology: Biodiversity* *3 - General Biology Laboratory* *16 - General Chemistry I, II, and III with Laboratory* *2 - Field Techniques and Scientific Communication* *2 - Applied Math: Problem Solving Skills and Scientific Communication*
09/2020	12/2020	8	**Leadership Development: Theory & Practice, Interventions, and Use of Self** *4 - Leadership Development* *4 - Organization Psychology*
01/2021	03/2021	4	**EastWest Psychology: Transforming Destructive Cognition/Emotion** *4 - East-West Psychology: Transforming Destructive Thought/emotion*

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EVERGREEN UNDERGRADUATE CREDIT:

Start	End	Credits	Title
03/2021	06/2021	4	**Drawing the Figure** *4 - Figure Drawing*
03/2021	06/2021	3	**Photography: Documentary** *3 - Documentary Photography*
09/2021	03/2022	32	**Environmental Biology and Chemistry** **11 - Organic Chemistry I and II with Laboratory* **4 - Organic Chemistry: Instrumentation and Spectroscopy* **5 - Microbial Ecology with Laboratory* **4 - General Microbiology with Laboratory* **3 - Environmental Microbiology with Laboratory* **3 - Biogeochemistry and Bioremediation with Field Methods* **2 - Environmental Chemistry*
03/2022	06/2022	16	**Developmental Biology** **5 - Cell Biology* **5 - Molecular Biology* **4 - Developmental Biology* **2 - Molecular Developmental Biology Laboratory*

Cumulative

219 Total Undergraduate Credits Earned

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To begin, I continued my educational path in the fall of 2019 with a program entitled “Irrepressible Bodies: Hope, Health, and Resilience in a Turbulent World” which engaged in an interdisciplinary inquiry into public health, community studies, and human biology. I examined the history and infrastructure of institutional public health in the U.S., as well as the social determinants of health, and immunization and population health. My exploration of transformative resilience as a positive response to change led me to study the common good, hope, individual and community resilience, socialization, and the roles of social capital in health and in communities. As well as emphasized the effects of wealth inequity, racialization, and ableism on health, medicine, and well-being. Study of epidemiology, learning, health education, and nutrition and nutritionally related diseases anchored spring quarters work.
In the spring of 2020 I took a course called “Health vs. Wealth” that explored the intersection where valued health care meets paid health care. In the American health care arena good intent is plagued by paradoxes that haunt prevention, access, research and treatment and unintended consequences were reviewed.
During the summer of 2020 I designed an independent learning contract entitled “Doula Training” where I further learned about health and human biology.

Continuing on, in the fall of 2020 to spring of 2021 I continued in the science realm and furthered my education in biology and chemistry in a program called “Integrated Natural Sciences.” Program work focused on the intersection of these disciplines to develop interdisciplinary understanding of the interactions of matter and energy in the natural world, and to develop problem-solving skills directed at understanding natural phenomena. This program focused on building my understanding of the process of science, field research experience, and reasoning skills.
Also, for fall of 2020 I took a program entitled “Leadership Development: Theory and Practice, Interventions, and Use of Self” focused on leadership theory and practice, personal and interpersonal skills essential for effective leadership, as well as understanding essential organization dynamics to enhance organizational climate and culture to support effective followership. The program assumes a willingness to accept necessary changes in behavior, to practice, to apply skills and to evaluate skill development through assessment of practice.
In the winter of 2021 I took a course called “EastWest Psychology: Transforming Destructive Cognition/Emotion” with a focus on developing a foundational understanding of mind/emotion from both Eastern and Western perspectives. The emphasis of the course was on Eastern (Buddhist) psychology concentrating on destructive cognition/emotion and its function as well as its antidotes.
Also, In the spring of 2021 I took a course entitled “Photography: Documentary” this course focused on principles of visual documentation in presenting accurate narratives about contemporary social, environmental, and/or personal issues. This course helped me to consider issues related to documentary photography including: ethics of representation, the role of the photographer as "insider" vs. "outsider," relationships between photographer/subject/viewer, contemporary social movements as visualized through mass and social media, and objectivity in documentary photography.
As well as in the spring of 2021 another course labeled “Drawing the Figure” The assignments challenged me to expand upon basic techniques through the study of the human figure and anatomy. I was taught basic anatomy for the artist and encouraged to learn the vocabulary of the posterior and anterior forms. I also studied the proper terms for the muscular and skeletal systems.
Furthermore, In the fall and winter of 2022, I furthered my understanding of the science realm by continuing with a science program entitled “Environmental Biology and Chemistry” was an interdisciplinary science program that used topics and theoretical concepts within microbiology and organic chemistry to study the natural world and human interaction with it, including anthropogenic pollution. It included upper division organic chemistry, environmental and general microbiology, environmental chemistry, and chemical instrumentation. Although each subject is presented separately, the material was delivered in an integrated manner, approaching many concepts from both biological and chemical perspectives.
In the spring of 2022 I was in a program called “Developmental Biology” an interdisciplinary science program that interwoven upper-division cell, molecular and developmental biology. In addition to the content, learning goals included the development of analytical and critical thinking and quantitative reasoning skills. The molecular cell biology portion was posited around the concept that the cell is the fundamental unit of life. I was required to properly

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maintain a laboratory notebook documenting my work and analyses of my experimental results.
All in all, time well spent at The Evergreen State College.

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March 2022 - June 2022: Developmental Biology

16 Credits

DESCRIPTION:
Faculty: Nancy C. Murray, Ph.D.

Developmental Biology was a one-quarter, interdisciplinary science program that interwove upper-division cell, molecular and developmental biology. In addition to the content, learning goals included the development of analytical and critical thinking and quantitative reasoning skills. Weekly activities included lectures, labs, and workshops. Students were required to actively contribute to the learning community and were evaluated on the bases of their performances on weekly quizzes, midterm and final exams, homework, workshops, and labs.

Molecular Cell Biology: The study of molecular and cellular biology was posited around the concept that the cell is the fundamental unit of life. Through this lens, students studied prokaryotic and eukaryotic cell structure, chromosomal organization of coding and non-coding regions, DNA mutations and repair mechanisms, protein structure and function, molecular genetic mechanisms (eukaryotic transcription and translation), biomembrane structure, membrane transport, protein trafficking, cell cycle regulation, post-transcriptional control mechanisms, molecular genetic techniques bioinformatics, and signal transduction pathways. The textbook used was *The Cell: A Molecular Approach,* by Cooper, 8th edition.

Developmental Biology: Developmental biology is the study of becoming, of change, and of the many cellular and molecular mechanisms accounting for those changes during an animal's life. Eukaryotic model organisms (yeast, *Drosophila melanogaster*, and *Xenopus laevis)* were used. Using the text, *Principles of Development,* by Wolpert, et al., 6th edition, students studied the following topics: fertilization, *Drosophila* and amphibian axis formation, neurulation, patterning of the central nervous system and brain growth, neural crest cells and axonal specificity, limb development, metamorphosis and, regeneration.

Laboratory

In the lab, students carried out experiments using *Xenopus laevis* to study axis formation and learned *in-vitro* fertilization methods. In addition, students acquired bench skills in data collection and analysis, aseptic technique, DNA isolation, polymerase chain reaction (PCR), restriction digest, CRISPR, and bioinformatics. Students were required to maintain a laboratory notebook documenting their work and analyses of their experimental results.

EVALUATION:
Written by: Nancy C. Murray, Ph.D.

Zoe was a serious and dedicated student all quarter, taking opportunities offered to better understand the intellectual content of the program.

Zoe demonstrated very good knowledge of the principles covered in the *Developmental Biology* program. This was evidenced by her performance on the weekly quizzes, the midterm, and the final exam. Zoe exhibited a very strong ability to apply concepts in solving complex problems. Similarly, in the cell and molecular biology components, Zoe made solid progress. She received high scores on the weekly quizzes, as well as on the midterm and final exam. All homework assignments were very detailed and similarly demonstrated Zoe's commitment to her education. It was apparent that she put in the time and effort, and it paid off.

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From the beginning, Zoe appeared to enjoy doing benchwork, and actively tried to make connections between what had been learned in lectures to work at the lab bench. Even when the results were not what was expected, Zoe took it as an opportunity to learn where things might have gone sideways. Zoe's lab notebook consistently showed a nice combination of experimental observation and analysis. Her notebook was an example of how to properly keep one and Zoe maintained that standard throughout the quarter.

Overall, Zoe had an excellent quarter of learning and has earned full, upper-division credit.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 16

*5 - Cell Biology
*5 - Molecular Biology
*4 - Developmental Biology
*2 - Molecular Developmental Biology Laboratory

* indicates upper-division science credit

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September 2021 - March 2022: Environmental Biology and Chemistry

32 Credits

DESCRIPTION:
Faculty: Andrew D. Brabban, Ph.D. and Paula Schofield, Ph.D.

Environmental Biology and Chemistry was an interdisciplinary science program that used topics and theoretical concepts within microbiology and organic chemistry to study the natural world and human interaction with it, including anthropogenic pollution. It included upper division organic chemistry, environmental and general microbiology, environmental chemistry, and chemical instrumentation. Although each subject is listed separately, the material was delivered in an integrated manner, approaching many concepts from both biological and chemical perspectives. Each week, students spent 9 hours in lecture and small group problem solving sessions, 7 hours in the laboratory and doing some fieldwork, and 2 hours in seminar discussions. Students were evaluated on the basis of weekly homework assignments, seminar assignments, field and laboratory reports, in-person class activities, and performance on weekly on-line quizzes and regular in-person examinations. Some students elected to take components of this full time program.

Organic Chemistry I and II with Laboratory: In fall quarter, students studied the relationship between the structure and behavior of organic molecules. Specific concepts included chemical bonding, acid-base properties of organic molecules, stereochemistry, nomenclature, electron delocalization and resonance. The chemistry of alkanes, alkenes, and alkynes were examined in detail, and the fundamental mechanism of electrophilic addition was emphasized. The laboratory work introduced common techniques in synthetic organic chemistry, including reflux, extraction, recrystallization, steam and simple distillation. Analytical techniques included thin layer chromatography, melting point analysis, gas chromatography, GC-MS, and infrared spectroscopy. In winter quarter, the chemistry of alkyl halides, carboxylic acids and their derivatives, benzene and its derivatives, aldehydes and ketones, as well as free radical reactions were covered. Emphasis was placed on the mechanisms of nucleophilic substitution and elimination, electrophilic aromatic substitution, nucleophilic acyl substitution, and nucleophilic addition. Thermodynamics and kinetics were highly emphasized as fundamental and guiding principles within each topic. For the winter lab work, in addition to a Grignard synthesis and a green chemistry synthesis of adipic acid, students conducted a 5-week interdisciplinary project to characterize microorganisms in soil via phospholipid fatty acid (PLFA) analysis. Students took soil samples from the Evergreen State College Campus, extracted the phospholipids from the membranes of microorganisms, chemically derivatized them to fatty acid methyl esters (FAMEs), then used GC-MS analysis to identify biomarkers and profile microbial communities. The textbook used was *Organic Chemistry* by Paula Yurkanis Bruice (8th Ed.).

Organic Chemistry: Instrumentation and Spectroscopy: Students gained significant hands-on training through individual and group workshops on the following instruments: FT-IR spectrophotometer, Gas Chromatograph, Gas Chromatograph-Mass Spectrometer, and FT-NMR spectrometer. In addition to learning significant background theory, students learned sample preparation, operation, and analysis of spectra/data for each instrument, and used this knowledge to analyze products from synthetic labs. Students also applied these skills to elucidate the structures of a series of unknown compounds through workshops and homework assignments. In addition, students used a tailored GC-MS method for the separation and analysis of fatty acid methyl ester (FAME) biomarkers to study microbial communities in soil.

General and Environmental Microbiology with Laboratory: This component of the program began by examining the broad variety of microorganisms so far identified, ways of growing microorganisms and measuring growth, the biochemistry of these species and their varying cellular structure. It then progressed to examining the roles microorganisms play in the environment and the broad diversity of

ecosystems they occupy. Specifically, we examined microbial metabolism and biogeochemical cycling at a biochemical level, examining the many modes of aerobic and anaerobic catabolism, such as chemolithotrophy. The laboratory component was structured to teach the basic techniques of microbiology required to safely and precisely manipulate microorganisms, such as aseptic technique, making media and growing cultures. Students learned to work quantitatively with organisms carrying out MPN and dilution series to examine water samples, bacterial and phage replication. Students also used quantitative methods to examine cellular processes such as electron transport, using biochemical assays such as the Hill Reaction. The textbook used was Madigan, M., Martinko, J., Bender, K.S., Buckley, G.H., Sattley, W.M., and Stahl, D.A. *Brock's Biology of Microorganisms* 15/e. New Jersey: Pearson: Benjamin Cummings, 2017.

Microbial Ecology and Bioremediation with Laboratory and Field Methods: Students gained an understanding of the relationships between, and the role of, microorganisms in natural and polluted environments. Course material examined microbial metabolism and biogeochemical cycling, water pollution, toxicology, wastewater treatment, methods of measuring microbial numbers and microbial activity, abiotic and biotic interactions within microbial communities, and bioremediation. Remediation of both organic and inorganic chemicals using active/passive, *in situ/ex situ*, chemical/biological processes including the design and use of wetlands was covered. Lab and field work focused on developing both quantitative and qualitative methods of measuring microbial growth and pollution including DO and BOD_5 assays, MPN, viable and total cell count methods, culture enrichment, soil analysis and genetic methods such as PCR detection of microorganisms in water samples. The textbook used was Madigan, M., Martinko, J., Bender, K.S., Buckley, G.H., Sattley, W.M., and Stahl, D.A. *Brock's Biology of Microorganisms* 15/e. New Jersey: Pearson: Benjamin Cummings, 2017.

Environmental Chemistry: Each week students read primary literature and other texts, and completed detailed homework assignments on each reading. Topics covered included green chemistry, energy use in the USA, biofuels from algae, contaminants of emerging concern, environmental hydrocarbon degradation, and the anthropogenic carbon cycle. Readings were mostly taken from primary literature: *Journal of the American Chemical Society, Bioresource Technology, Chemosphere, Environmental Pollution*; and also other texts: *US Energy Information Administration (EIA) Annual Outlook 2021; epa.gov*.

EVALUATION:
Written by: Andrew D. Brabban, Ph.D. and Paula Schofield, Ph.D.

Zoe entered this program to learn advanced concepts, as well as lab and field techniques within biology and chemistry to prepare for a future career in science or medicine.

Coursework:
In the organic chemistry component of the program, Zoe submitted all assigned work and completed the online and in-person quizzes and exams. Zoe did extremely well on weekly quizzes, and the quality of her submitted work was excellent. She did however struggle with the more complex questions on in-person exams. Overall, Zoe demonstrated a fairly good grasp of the fundamentals of organic chemistry, specifically, nomenclature, structure-property relationships, stereochemistry, and thermodynamic principles governing molecular structure and reactions. In addition, she showed an adequate understanding of organic reactions, mechanisms, and multi-step synthetic sequences.

Zoe showed an overall fairly good grasp of both general and environmental microbiology, being able to solve the qualitative and quantitative problems, including growth, cell quantification, cell morphology and structure, and metabolism. In the environmental component, Zoe showed she could solve all the quantitative redox and thermodynamic problems as they relate to the environment. In microbial ecology and bioremediation, Zoe showed a fair understanding of the theory covered and the ability to apply both

quantitative and qualitative methods to measure microbial numbers and activity in the environment. Zoe was also able to apply her biogeochemical knowledge to assess polluted sites, and then design the appropriate remediation processes. Zoe completed all the online quizzes and homework through both quarters, and these were her best work in this part of the program, always being very good and often excellent.

Zoe came to seminar discussions well prepared, completing detailed assignments on the readings. Her work showed she had a solid understanding of the topics and had thoroughly read the texts. In addition, Zoe was an engaged member of seminar discussions, contributing well to the dialogue.

Laboratory and Field Work:
Zoe successfully worked with a variety of lab partners, and overall she learned the basic laboratory bench skills and techniques in organic chemistry and microbiology.

Zoe worked very well with her group members on all aspects of the interdisciplinary field assessment and lab projects. These included an in-depth study (discharge, dissolved oxygen, conductivity, pH, temperature) of McLane Creek, a rural salmon spawning creek that drains into Eld Inlet of Puget Sound; a BOD5 study of the college campus natural waters; and the examination of ground water flow in reference to petrochemical pollution. Zoe's data collection was efficient and thorough, and overall, her group's project reports were highly organized, included detailed site descriptions, the appropriate calculations, tables, and figures. Overall, the two larger group reports on McLane Creek and BOD5 were good and excellent respectively. Zoe also contributed significantly to the 5-week group project on the characterization of soil microbial communities via phospholipid fatty acid/FAME analysis. Zoe's group successfully obtained and characterized numerous FAMEs as microbial biomarkers. Zoe's group submitted a fairly good final lab report of this work. It was organized, but lacked detail throughout.

Chemical Instrumentation and Spectroscopy:
Zoe learned the theory and practical application of chemical instrumentation typically used in organic chemistry. Specifically, she learned how to prepare samples, operate, and analyze data from the FT-IR, GC, and GC-MS instruments, and she used these to analyze products from organic syntheses. In addition, Zoe and her project group successfully used a tailored GC-MS method for the separation and analysis of FAME biomarkers to study microbial communities in soil.

Zoe also learned the theory of FT-NMR and successfully analyzed spectra, as evidenced by homework assignments and performance on several quizzes. She was also trained through several individual hands-on instrumentation workshops, including sample preparation, to become certified to use the FT-NMR spectrometer unsupervised.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 32

*11 - Organic Chemistry I and II with Laboratory
*4 - Organic Chemistry: Instrumentation and Spectroscopy
*5 - Microbial Ecology with Laboratory
*4 - General Microbiology with Laboratory
*3 - Environmental Microbiology with Laboratory
*3 - Biogeochemistry and Bioremediation with Field Methods
*2 - Environmental Chemistry

* indicates upper-division science credit

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March 2021 - June 2021: Photography: Documentary

3 Credits

DESCRIPTION:
Faculty: Carrie Chema

This class explored how digital photography is used as a tool for creative documentation. Students focused on principles of visual documentation in presenting accurate narratives about contemporary social, environmental, and/or personal issues. Through this project-based course, students identified, researched, and made images that investigated issues of their choice primarily circulated around three main projects; telling the story of a person, then a place, and finally an issue. Their work culminated in a final portfolio that took the form of the student's choice (virtual exhibition, printed zine or photobook, multimedia website, etc.) Students participated in group discussions and critiques during which they considered issues related to documentary photography including: ethics of representation, the role of the photographer as "insider" vs. "outsider," relationships between photographer/subject/viewer, contemporary social movements as visualized through mass and social media, and objectivity in documentary photography.

EVALUATION:
Written by: Carrie Chema

When actively engaged with the project-based work of the course, Zoe had a strong quarter in documentary photography. Zoe participated in most class meetings, group discussions, and critiques and was moderately engaged with most projects throughout the quarter. Zoe was a positive and constructive member of our learning community and thrived in smaller group discussion sessions.

In the project work, Zoe worked diligently and paid careful attention to their images, incorporating feedback in thoughtful ways and sticking with their point-of-view when feeling strongly about their perspective. Zoe had a unique aesthetic that was characterized by embrace of warm, saturated color and unexpected compositions. It was easy to look at an image and identify it at one of Zoe's because of the strength of that point-of-view.

Zoe's strongest work of the quarter came in the second project, "story of a place." In this assignment, Zoe showed a working understanding of all learning objectives associated with this project which included consideration of how places are defined/visualized/interpreted through the photographic process, conducting place-based research, relationship of movement and positionality in visual story telling, power of compositional decisions, ethical decision-making and the relationship between place/ photographer/viewer. Zoe chose the subject of couches for this assignment and created a series of images about the couch as a stage for various types of human interaction. This was a captivating and engaging topic that showed Zoe's unique approach to problem-solving. The images themselves were rich with vibrant color, lively, and exciting to look at. The series would be strengthened by a more discerning eye towards cohesion but, nonetheless, the series contained very strong individual images.

Zoe did not submit a final portfolio which, as outlined in the syllabus. The work that Zoe did submit showed clearly that Zoe had a talent for photography and excelled when able to remain actively engaged with the work.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 3

3 - Documentary Photography

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March 2021 - June 2021: Drawing the Figure

4 Credits

DESCRIPTION:
Faculty: Emily L. R. Adams, MFA

In this introductory to intermediate course, students learned foundational principles of fine art figure drawing techniques. Assignments challenged students to expand upon basic techniques through the study of the human figure and anatomy. Students discovered individual sensibilities of mark-making and aspects of personal vision through various traditional and non-traditional drawing media and techniques. Emphasis on observational skills, proportional and value relationships of nude model slideshow images. Students were taught basic anatomy for the artist and encouraged to learn the vocabulary of the posterior and anterior forms. They also studied the proper terms for the muscular and skeletal systems. This class met remotely every week in zoom. Individually, students kept a sketchbook completed regular drawing assignments outside of class. Students presented a final drawing at the end of the quarter in a group critique. They were also required to compile and submit a digital portfolio of all completed assignments.

EVALUATION:
Written by: Emily L. R. Adams, MFA

Zoe Ortega-Owen was a great student who understood fine art figure drawing techniques. During this course, Zoe was an engaged and active participant during online class sessions when drawing models from an online source. Zoe's perseverance in navigating the obstacles of working from a make-shift home studio proved Zoe's investment of time and dedication to the academic work. Zoe successfully fulfilled asynchronous activities, which included:

- Following along with video tutorials to draw and understand technical concepts.
- Drawing and studying human anatomy of the skeletal and muscular systems.
- Building a regular sketchbook practice.

Zoe's final assignment was very thoughtfully conceived and executed as a complete finished artwork. Zoe worked professionally and provided a good communication model and consistent attendance with the synchronic class community sessions. Zoe was a highly valued member of the studio arts learning community and was encouraged to continue work in the arts and humanities through online or in-person classes!

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 4

4 - Figure Drawing

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January 2021 - March 2021: EastWest Psychology: Transforming Destructive Cognition/ Emotion

4 Credits

DESCRIPTION:
Faculty: Jamyang Tsultrim, MA. Loppon Degree

This course focused on developing a foundational understanding of mind/emotion from both Eastern and Western perspectives, based on scientific dialogue between noted philosophers, psychologists, neuroscientists and the Dalai Lama of Tibet. The emphasis of the course was on Eastern (Buddhist) psychology concentrating on destructive cognition/emotion and its function as well as its antidotes. Students chose one destructive state of mind to study in-depth, and developed model five-week programs to manage these destructive states using effective East/West interventions. The main textbook was *Destructive Emotions: How Can We Overcome Them? A scientific dialogue with the Dalai Lama* narrated by Daniel Goleman.This course was taught remotely both through synchronous meetings and asynchronous activities in this quarter due to COVID-19. Student evaluation was based primarily on student achievement of class learning objectives, attendance, in-class participation, and completion of required assignments.

EVALUATION:
Written by: Jamyang Tsultrim, MA. Loppon Degree

Zoe Ortega-Owen fulfilled all requirements of this remote teaching class. She showed particular strength in engaging actively with all class activities. She was very responsible in completing all the assignments on time and attending all the classes. She achieved a foundational understanding of the mind/emotion through completing a mid-term paper, maintaining active in-class participation during seminar discussion, writing good quality reflection paper and turning in seminar preparedness paper.

In particular, Zoe's mid-term paper showed a clear understanding of all essential questions on the destructive emotion, its sources and function as well as interventions to transform it from Buddhist, Western (philosophy) scholars' perspectives and personal reflection. She gained significant insight on the topic and showed her familiarity with the contents of the assigned textbooks. She developed effective methods to transform destructive mind/emotions through maintaining "*The Mindful Self-compassion (MSC) Workbook*" exercises focused on observing interactions between mind, emotion and behaviors. Her *MSC* workbook showed consistent practices and kept a detailed documentation of them emphasizing on the three core concepts and skills. She expanded her understanding of mind/emotion as well as explored the effectiveness of the mindful self-compassion through direct experience.

In addition, Zoe demonstrated an understanding of specific destructive emotions as well as the ability to develop practical methods for transformation of destructive emotion by designing a model five-week program titled "Body Awareness." This final program demonstrated her in-depth insight on the topic by defining emotion and destructive emotion, awareness and body awareness and developing a comprehensive five-week program. She reviewed her relevant sources effectively and applied her comprehension of them in this paper. Standard academic writing utilizing APA style and format was appropriately applied in the final paper.

In brief, Zoe clearly achieved a foundational understanding and developed skills in transforming destructive thought/emotions for this class. Because of her development in understanding and processing human emotion, she was inspired to maintain her growth in both academic and personal well being. She has shown genuine enthusiasm and is prepared to advance to further studies in these topic areas.

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SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 4

4 - East-West Psychology: Transforming Destructive Thought/emotion

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September 2020 - December 2020: Leadership Development: Theory & Practice, Interventions, and Use of Self

8 Credits

DESCRIPTION:
Faculty: Marcella Benson-Quaziena, Ph.D.

Students in "Leadership Development: Theory & Practice, Interventions and Use of Self" focused on leadership theory and practice, personal and interpersonal skills essential for effective leadership, as well as understanding essential organization dynamics to enhance organizational climate and culture to support effective followership. This course was designed to develop students who wanted to increase their knowledge and skills of self as a leader and focused on enhancing skills to influence and organize others to accomplish key organizational goals. We spotlighted leadership principles, complexities and challenges as well as individual strengths and developmental needs. The program assumes a willingness to accept necessary changes in behavior, to practice, to apply skills and to evaluate skill development through assessment of practice. Fall quarter focused on leadership theory and practice. The quarter laid out a theoretical and practical foundation of leadership. We explored the breadth and limitations of leadership theories (past and present) and traced their evolution. The course looked at the organization as the context for leadership and how that context influences both leadership and followership.

The objectives of the program were: 1) To gain awareness of leadership theory, philosophies and styles; 2) To facilitate integration of personal experience and leadership qualities and abilities into a systems and organizational framework; 3) To develop and enhance self-awareness through use of leadership assessment tools; 4) To provide leaders with the awareness and tools for creating cultures in which followers will more readily act as partners; 5) To develop a personal approach to effective leadership; 6) To think critically about one's own leadership style and how it impacts the use of self in organizational settings; 7) To understand the evolution of the field of organizational development, including its primary values, theories, models, and methodologies; 8) To understand organizational development as a process of fundamental change in the organization's culture.

Text for the program consisted of: Forman & Ross's, *Integral Leadership: The Next Half-Step*; Laloux's *Reinventing Organizations*; Northouse's, *Leadership Development: Theory & Practice;* Tapia's *The Inclusion Paradox*; and Torbert's, *Action Inquiry: The Secret of Timely and Transforming Leadership*.

EVALUATION:
Written by: Marcella Benson-Quaziena, Ph.D.

Zoe successfully completed the program. Her personal goals were to develop skills to be more confident in her writing and to focus on her "learning" rather than due dates. Her writing assignments were late; however, the critiques brought depth and breadth to her understanding. In writing about what she believed to be true she stated

> "I am becoming myself through expressing a lot of the characteristics of a servant leader. I believe being a servant leader is the type of leader I am. A math and chemistry situation have provided the opportunity for me to manifest becoming myself. I do believe that becoming myself as a servant leader is done by me learning those traits from childhood and being able to apply them to individuals and groups, particularly in chemistry and math."

Her small group's excellent final project focused on leadership dynamics through several scenes from the film "Hidden Figures". The leadership approaches they applied to the film included: Leader-member

exchange theory; servant leadership; authentic leadership; and transformational leadership. Inquiry into the film included examination of the following question posed by the program: What leadership dynamics are present in the film; who occupies leadership roles in the film; were the characters aware of their roles as leaders; when do the roles shift; in what ways do the leaders encourage followers; how did leaders embrace the dynamic of inclusion; using the course materials what did the main character and others do well (or not); what are ways the characters can reinvent themselves as leaders; what leadership lessons did they learn from this film; and as they examined their own experience with leadership as a parallel to the film, how were they challenged to think differently about leadership. The presenters discussed elements of the film as well as their own stance and challenges as they engaged and broaden their views on leadership dynamics throughout the term.

It was a pleasure to have Zoe as a member of the program She is prepared to further her studies in the area of social and organizational systems.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 8

4 - Leadership Development
4 - Organization Psychology

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September 2020 - June 2021: Integrated Natural Sciences

38 Credits

DESCRIPTION:
Faculty: Clarissa Dirks, Ph.D., Carri J. LeRoy, Ph.D., Lydia McKinstry, Ph.D.

Integrated Natural Sciences covered topics in general biology, general chemistry, statistics, and applied math. Students could choose to enroll in all or various combinations of the subject areas. Program work focused on the intersection of these disciplines to develop students' interdisciplinary understanding of the interactions of matter and energy in the natural world, and to develop problem-solving skills directed at understanding natural phenomena. Students used scientific process and reasoning skills and were expected to gain field research experience in designing experiments and analyzing data. Depending on the subject area, evaluations of student achievement were based on: weekly on-line quizzes, on-line examinations, weekly homework assignments, discussion boards, final and practical exams, formal laboratory reports, and engagement and collaborative participation in all program activities.

General Biology: Evolution and Ecology – Lectures and workshops focused on introducing students to the following areas of general biology: chemical evolution, mitosis and meiosis, Mendelian genetics, evolutionary processes, population genetics including Hardy-Weinberg equilibrium, speciation, phylogenies, history of life, introduction to ecology and earth systems, as well as community, population and ecosystem ecology. Assessments were based on weekly homework assignments and weekly quizzes.

Textbook: S. Freeman, *Biological Science*, 6th ed.

General Biology: Molecular and Cell Biology – Lectures and workshops focused on introducing students to the following areas of general biology: structure and function of cells and biomolecules, energy and enzymes, cellular respiration, metabolism, the central dogma of how genes work, gene regulation and genomics. Assessments were based on weekly homework assignments and weekly quizzes.

Textbook: S. Freeman, *Biological Science*, 6th ed.

General Biology: Animal Physiology – Lectures and workshops focused on introducing students to the following areas of general biology: water and electrolyte balance in animals, nutrition, gas exchange, circulation, nervous systems, and reproduction and development. Assessments were based on weekly homework assignments and weekly quizzes.

Textbook: S. Freeman, *Biological Science*, 6th ed.

General Biology: Biodiversity – Lectures and workshops focused on learning about the variety of life on earth by examining bacteria, archaea, green algae and plants, protists, fungi, and animals. To complement this work, students also learned about viruses and the immune system of animals. Assessments were based on weekly homework assignments and weekly quizzes. The culminating experience was an in-depth individual research paper and a group presentation.

Textbook: S. Freeman, *Biological Science*, 6th ed.

General Biology Laboratory – Laboratory investigations were focused on basic microscopy using both dissecting and compound microscopes, observational studies, making solutions and media, microbiology techniques such as working with bacteria, plant dissection and analyses, as well as DNA extraction,

PCR, restriction digestion and gel electrophoresis. In-person labs gave students hands-on skills while learning theory. Remote laboratory exercises focused on the theory of the techniques used and reading of primary literature papers associated with the skills.

General Chemistry I, II, and III with Laboratory – The following fundamental principles of chemistry were presented: the definition and characterization of matter and inorganic nomenclature; stoichiometry and the mole; atomic structure, electron configuration and periodic properties of the elements and trends. Principles of chemical bonding including Lewis structures and molecular shape were also introduced as well as gas laws and the relationship between structure and physical states of matter. More detailed quantitative topics included thermochemistry, chemical kinetics, chemical and acid-base equilibria including buffers, thermodynamics, redox reactions, and electrochemistry. In the chemistry laboratory students were introduced to basic chemistry experiments, as well as qualitative and quantitative techniques involving aqueous solution chemistry. Experiments included acid-base titrations; redox titration; kinetics and determination of activation energy; free energy and solubility equilibria; and testing of buffer capacity. Evaluations were based on participation, engagement, and weekly assessments including homework assignments, on-line examinations and quizzes, post-lab homework assignments, and formal laboratory reports.

Textbook: T. E. Brown, H. E. LeMay, B. E. Bursten, C. J. Murphy, P. M. Woodward, and M. W. Stoltzfus, *Chemistry: The Central Science,* 14th ed.

Statistics I – Concepts in Statistics I and hands-on activities allowed students to practice using statistical methods with real-world data. Topics included probability, variable types, basic summary statistics (mean, median, mode, variance, standard deviation, standard error), and parametric statistical methods: Students t-tests, Chi-square tests, Least Squares Regression, and Correlation. Students learned to use formulae and macros in Excel. Students learned to analyze raw data, interpret statistical results, and create professional quality figures to display scientific results. Students had biweekly quizzes on statistical concepts to test their own knowledge progression. Students engaged in weekly discussion boards while working on statistics labs to problem-solve issues with data analysis, software, and the interpretation of statistical findings. They completed a final practical exercise where they selected the appropriate statistical tests to analyze data collected through field research projects. They needed to collect and organize data, run hypothesis tests, interpret results, and create figures.

Field Techniques and Scientific Communication – Field exercises were intended to deepen the understanding of concepts covered in biology and statistics lectures/assignments. This area focused on data collection using field techniques such as plant identification, snail surveys, and quadrat plot sampling. The focus was on building students' understanding of the process of science with a particular emphasis on experimental design, data collection, statistical analysis, and scientific communication. Mid-to-late fall quarter, students read and answered questions about three primary literature papers, and worked in groups to design small field projects. As a small group, they collected and analyzed field data, wrote up their findings in a short paper, and presented their work to the class in a formal presentation. Mid-to-late winter quarter, students read and answered questions about two primary literature papers and a research talk presented to the class.

Applied Math – Assignments included problem sets on algebra practice, including logarithms and exponents, dimensional analysis, making solutions and dilutions, spatial reasoning, graphing and experimental design. Evaluations were based on participation and weekly completion of the work.

Foundations of College Success – First-Year students' academic skill development was supported by their participation in Foundations of College Success, a module of instruction and community-building activities where students were introduced to college support services and practices, wellness strategies, study techniques, and metacognitive strategies to foster both personal and academic growth.

Ortega-Owen, Zoe A — A00420052
Last, First Middle — Student ID

EVALUATION:
Written by: Clarissa Dirks, Ph.D., Carri J. LeRoy, Ph.D., Lydia McKinstry, Ph.D.

Zoe enrolled in the General Biology, General Chemistry, Field Techniques and Scientific Communication, and Applied Math components of Integrated Natural Sciences. Zoe's engagement in the program was excellent as evidenced by attendance and participation. Zoe was committed to doing well and learning the concepts and methods introduced. Throughout the year, students synthesized their learning with many homework assignments, weekly quizzes and biweekly exams, formal reports, and by reading several primary literature papers. Zoe has now gained the foundational knowledge necessary to pursue upper level work in science.

General Biology: Evolution and Ecology – Zoe demonstrated an overall very good comprehension of the concepts and skills presented in General Biology: Evolution and Ecology as evidenced by work in online problem-solving sessions and online weekly quizzes. Zoe's performance on quizzes indicated a very good understanding of the material. Zoe turned in all but one homework assignment, which were well done. In general, Zoe showed enthusiasm for learning biology and worked well with peers during online workshop sessions.

General Biology: Molecular and Cell Biology – In General Biology: Molecular and Cell Biology, Zoe demonstrated an overall very good comprehension of the concepts as evidenced by work in online problem-solving sessions and online weekly quizzes. Zoe's performance on quizzes indicated a good understanding of the material. Zoe turned in all homework assignments.

General Biology: Animal Physiology – Zoe demonstrated an overall outstanding comprehension of the concepts and skills presented in General Biology: Animal Physiology as evidenced by work in online problem-solving sessions and online weekly quizzes. Zoe's performance on quizzes indicated an excellent understanding of the material. Zoe turned in all homework assignments.

General Biology: Biodiversity – Zoe demonstrated an overall outstanding comprehension of the concepts and skills presented as evidenced by their work in online lectures and workshop sessions. Zoe's performance on online quizzes indicated that they had excellent understanding of the material. Zoe turned in all homework assignments, which were always well done. In general, Zoe showed enthusiasm for learning biology and worked well with peers during online workshop sessions. At the end of the quarter, Zoe showed excellent communication skills with an informative paper and a well-delivered presentation on SARS-CoV-2, a Betacoronavirus.

General Biology Laboratory – This work was an opportunity for Zoe to engage in hands-on biology to learn a variety of skills for upper division work. During lab sessions, Zoe showed very good laboratory skills, was a good problem solver, and frequently asked insightful questions. Zoe turned in all pre-lab assignments and laboratory reports showed an outstanding record of thinking and actions while performing experiments.

General Chemistry I, II, and III with Laboratory - Zoe is a dedicated student who worked hard to develop an overall very good to excellent understanding of the basic concepts and skills presented in chemistry. Zoe was well prepared for each activity and submitted all homework assignments on time and with great detail. Zoe was a very active learner throughout the year and made excellent use of workshop and tutoring time, which greatly enhanced her learning. In fact, Zoe made outstanding contributions to the learning community; many of Zoe's classmates benefitted from her collaborative strength during workshop sessions. Zoe's responses on homework assignments, quizzes, and examinations demonstrated very good working knowledge of stoichiometry and aqueous solution calculations, atomic structure and periodic trends, and the fundamental theories of chemical bonding. Zoe also demonstrated very good to excellent understanding of the quantitative material involving acid-base chemistry and

buffers, redox chemistry, kinetics, chemical equilibrium and thermodynamics. Zoe was very engaged during the chemistry laboratory sessions and effectively developed the bench skills introduced. Zoe was also well prepared for laboratory work as evidenced by her completed pre-lab assignments. Zoe completed all post-lab assignments and her laboratory reports included calculations and data analysis that demonstrated very good to excellent understanding of the purpose and concept of each experiment.

Field Techniques and Scientific Communication – Zoe demonstrated very good learning and engagement in Field Techniques and Scientific Communication and turned in all assignments in this area. Zoe participated in learning field survey techniques and seminars of primary literature about evolution and ecology. As a culminating research experience, Zoe engaged in a small group study comparing fern species richness relative to the proximity of water. Zoe's team was tasked with both writing a scientific paper and developing an oral Ignite presentation on their research. It involved considerable time outside of class as well as collaboration and organization. The group gave a very good presentation of their work and Zoe was an equal contributor.

Applied Math – Zoe was consistent in participation and collaboration in applied math workshops throughout the quarter. She submitted all of the problem sets and to a high level of completion. This work demonstrated very good quantitative reasoning skills.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 38

4 - General Biology: Evolution and Ecology
5 - General Biology: Molecular and Cellular Biology
3 - General Biology: Animal Physiology
3 - General Biology: Biodiversity
3 - General Biology Laboratory
16 - General Chemistry I, II, and III with Laboratory
2 - Field Techniques and Scientific Communication
2 - Applied Math: Problem Solving Skills and Scientific Communication

Ortega-Owen, Zoe A — A00420052
Last, First Middle — Student ID

June 2020 - September 2020: Doula Training

16 Credits

DESCRIPTION:
Faculty: Carolyn D. Prouty, DVM

This one quarter independent learning contract entitled **Doula Training** was designed for the student to gain knowledge about the professional responsibilities of birth doulas as well as knowledge with pregnancy and childbirth, primarily though the successful completion of an online doula training course through the International Doula Institute (IDI). The student learned how doulas support childbearing people during pregnancy, birth, and immediate postpartum and understand some of the social and political issues within the birth world/community, hospital, and birth spaces.

The IDI doula training modules covered topics including:

- doula scope of practice, client privacy
- overall knowledge of pregnancy and childbirth
- assessing and anticipating needs of the birthing woman and partner
- prenatal appointments: goals of an appointment, creating a birth plan
- common birth interventions practiced by midwives and obstetricians
- being on-call, contents of a “doula bag”, and other professional preparations,
- comfort measures, options for pain relief, and other interventions
- emotional intelligence, communication skills, and professionalism
- doula business basics: starting a business, promotions, websites, social media, and building relationships within the community.

The student read and took notes on extensive readings provided by the International Doula Institute, including the following books: *Ina May’s Guide to Childbirth; Pregnancy, Childbirth, and the Newborn* by Penny Simkin et al*, The Thinking Woman’s Guide to a Better Birth* by Henci Goer*, Pushed: The Painful Truth about Childhood and Modern Maternity Care* by Jennifer Block, and readings from *Emotional Intelligence 2.0* by Bradbury et al. She also watched films related to birth as well as birthing videos.

The student completed nine modules throughout this quarter, and submitted weekly logs of her hours (over 400 in total), as well as 6-7 page weekly papers recording her learning for that week. Additionally, she completed two larger summary papers (22 pages and 12 pages) capturing her work over each half of the quarter.

EVALUATION:
Written by: Carolyn D. Prouty, DVM

Zoë did very strong work this quarter, mastering all of her learning objectives of material that she was thrilled to learn. To her credit, she worked diligently and persistently with strong self-discipline, and worked her way through a massive amount of reading, writing, and learning in 10 weeks, putting over 400 hours into her studies. She finished the quarter having amassed a deep and broad exposure to the doula profession, the physiology and medical practices surrounding birth, the experiences of the birthing person and their partner, and the critical role that a doula can make to the health and well-being of both birther and baby.

Zoë followed the well-developed and thorough training program provided by the International Doula Institute (IDI), which lays out students’ learning activities in thoughtful, thorough modules. Zoë completed separate work for IDI which was not evaluated as a part of this contract, as well as separate weekly

papers that recorded her learning in great detail. She used her papers, including her lengthy summary papers, to capture each element of her learning, and her writing was generally clear and well organized. Zoë had a specific goal of strengthening her voice and self-confidence in her writing, and improving the directness of her prose. At this, she was quite successful, as I am familiar with her writing from her first quarter at Evergreen this past fall (2019). Zoë made good progress in both the clarity and organization of her writing this quarter, and her excitement about the knowledge she was acquiring gave her writing vigor and vitality. She can continue to work on some of the mechanics of writing in her future work.

Zoë's training involved more than just birth in the US. One of the assignments associated with the IDI training was to write an essay about pregnancy and birth traditions across cultures. Zoë chose to write about her aunt from Ethiopia, and was able to interview her at length. Zoë reflected, "I learned a lot about rural Ethiopian Pregnancy and birth traditions but especially about the importance of how a Doula can be supportive. I learned the importance of a birthing person knowing what is happening and going to happen during birth."

Zoë also examined the relationships of the variety of birth professionals including obstetricians, different types of midwives, and doulas, and some of the communication and power dynamics involved in maternity care. In a paper considering some of these dynamics, Zoë reflected that at times, "[A] doula is compensating for both a social deficit in maternity care and a power deficit, due to a doula becoming a shield or a buffer between a birthing person and the hospital's interests."

Zoë has much to be proud of in her work this quarter, including her ability to take full advantage of the resources around her to absorb vast amounts of information about a topic, the profession of birth doulas, for which she holds so much passion.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 16

16 - Independent Learning Contract: Doula Training

Ortega-Owen, Zoe A — A00420052
Last, First Middle — Student ID

March 2020 - June 2020: Health vs. Wealth

4 Credits

DESCRIPTION:
Faculty: Mary Dean, PhD

This course explored the intersection where valued health care meets paid health care. In the American health care arena good intent is plagued by paradox and often yields high cost and a miss-match with initial intent. Paradoxes that haunt prevention, access, research and treatment and unintended consequences were reviewed and students submitted a final research paper focusing on one of these areas of paradox.

The book, *Redefining American Medicine: Creating Value Based Health Care* by Michael Porter and Elizabeth Teisburg not only provided the outline for the development of the national Affordable Care Act, it was used to guide student review of the broken health care system and solutions for the system. Weekly, students submitted written synopsis of the book chapters.

The Public Broadcasting films "Sick Around the World," "Sick Around America," "Remaking of American Medicine" and "The Good News About American Medicine" were used to illustrate the performance of the health care system and to inform group discussion. Guest speakers presented current activities such as The Role of the Physician, The Role of the Hospital Board, The role of the Consumer in Health Behavior Change and The Role of the Washington State Health Care Authority. Also, students provided a written analysis of the report on the national use of Complimentary and Alternative Medicine.

The personal aspects of Public Health policy were addressed as students were required to engage daily in one self-care activity specific to stress management and make a verbal report in class weekly.

EVALUATION:
Written by: Mary Dean, PhD

Zoe met course expectations, while working in a synchronous environment, and contributed to the creating of a learning community. She submitted all required film and reading summaries and displayed insightful comprehension of the core content.

Zoe was very faithful in keeping a daily exercise regimen and in weekly reporting the activity to the class.

She produced a research report focused on a Review of the Central Issues Presented in Health vs Wealth. The document was well organized, with an easy flow of ideas and was appropriately referenced. Sharing this class with Zoe was a pleasure.

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 4

4 - Public Health

Ortega-Owen, Zoe A — A00420052
Last, First Middle — Student ID

September 2019 - June 2020: Irrepressible Bodies: Hope, Health, and Resilience in a Turbulent World

48 Credits

DESCRIPTION:
Faculty: Carolyn Prouty, D.V.M., Joli Sandoz, M.F.A., M.A., M.A.

FALL QUARTER**:** Participants in the first quarter of *Irrepressible Bodies: Hope, Health, and Resilience in a Turbulent World* engaged in an interdisciplinary inquiry into public health, community studies, and human biology. We examined the history and infrastructure of institutional public health in the U.S., as well as the social determinants of health, and immunization and population health. Our exploration of transformative resilience as a positive response to change led us to study the common good, hope, individual and community resilience, socialization, and the roles of social capital in health and in communities. Finally, we examined topics in gender, feminist, and LGBTQ lives such as identity, discrimination, and oppression, and investigated related health disparities.

Program members read articles and book chapters, discussed each week's readings in a Tuesday seminar, participated on Wednesday in inquiry-based small group workshops and learning activities for further concept exploration and application, and then reflected on their work at the end of each week. Entries in a learning notebook, including notes from readings and learning activities, provided material from which to craft weekly inquiry papers. The culminating integrative project required participants to develop an essay during an eight-week process of review and iteration. Writers presented their project to the group in a seven-minute spoken presentation. The critical thinking program component consisted of instruction, response, and practice in analytical thinking. We relied on metaphor as a tool for making connections between program threads and key ideas.

Our study of human biology focused on fundamental understandings of how structure relates to function in cells and tissues, and in the muscular, skeletal, integumentary, endocrine, and reproductive systems of the human body. We used an online text, videos, and modeling of pathological conditions as our texts and workshops. Students acquired laboratory and clinical skills including microscopy and dissection. Faculty assessed learning through lab worksheets, take-home quizzes, and participation in lab and lecture discussions.

Participation in Greener Foundations, a quarter-long module of instruction and community-building activities, supported students' academic skill development. Participants were introduced to college support services and practices, wellness strategies, study techniques, and reflective writing.

WINTER QUARTER**:** Our work in the winter quarter of this three-quarter program emphasized governance and government, including legislative process and resident/citizen opportunities for advocacy. We also studied the effects of wealth inequity, racialization, and ableism on health and well-being. Our study of "race" included its non-biological basis, as well as racial disparities in health and medicine. In addition, we critically examined the medical vs. social models of disability.

Readings included *The Long Haul* (Myles Horton) and *The Value of Nothing* (Raj Patel, chapters 1-6), and articles presenting sociological theory and its application to issues of individual and population health. The Washington State Legislature was in session; students researched and followed through the legislative process their choice of one to three bills relevant to program themes, participated in the Legislative Day training and visit with legislators organized by an advocacy organization (again of their choice), and toured the Capitol building.

Program members turned in reading notes as preparation for weekly seminars, and documented their analysis of ideas from the readings in weekly essays (450-600 words). Three longer papers (900-1200

words) spaced through the quarter provided opportunity for complex inquiry, including synthesis. A day-long visit to Evergreen's Tacoma campus, a unique on-going experiment in equitable adult learning, and a substantive case study exercise involving market analysis and policy writing provided opportunities for participants to integrate their learning. They reported on their bill tracking efforts, advocacy activities, and associated learning in a five-minute spoken presentation.

Our continued study of human biology this quarter focused on fundamental understandings of the neurologic, sensory, blood, cardiovascular, respiratory, immune, and urinary systems of the human body. We used an online text, and videos and modeling of pathological conditions served as our resources for workshops and learning. Students refined laboratory and dissection skills through participation in labs where they determined their own blood types; dissected a brain, eye, 'pluck' (larynx/lungs/heart), and kidney; and participated in a lab, manipulating and measuring changes in their urine. Faculty assessed student learning through lab worksheets, take-home quizzes, and participation in lab and lecture discussions.

Students' academic skill development was supported by their participation in Foundations of College Success, a module of instruction and community-building activities during which students were introduced to college support services and practices, wellness strategies, study techniques, and metacognitive strategies designed to foster both personal and academic growth.

Throughout the program, students were invited to rethink assumptions, respond to the ideas of others, and work collaboratively during workshops, frequent small group discussion, and seminars.

SPRING QUARTER: Study of epidemiology, learning, health education, and nutrition and nutritionally-related diseases anchored our spring quarter work.

Program members engaged with the following tools used for measuring population health and disease detection: measures of disease frequency and risk, study design, and diagnostic test parameters. After study of online texts, videos, and media reports, participants demonstrated media appraisal and health numeracy skills through quizzes and weekly homework that asked them to define, calculate, and interpret epidemiologic statistics, and to assess media reports of epidemiologic data in health research.

Readings in behavior change theory and related research articles introduced program members to health literacy, and provided a background in foundational concepts from the field of health education. This theoretical base supported individual metacognition about personal learning practices, particularly as related to learning and growth mindset (Dweck). Participants also brought this knowledge to their work in identifying and analyzing selected health education materials and approaches, some of which focused on social circumstances shaped by COVID-19.

Program members wrote blog posts to synthesize each week's learning, collaboratively annotated and assessed online articles as they prepared for synchronous class sessions, and completed a research paper or a health education project on a nutrition-related topic of their choice. Faculty provided feedback on critical thinking as documented in this work and in synchronous discussion contributions.

Our study of nutrition, supported by lectures, videos, and annotation of journalistic articles, and assessed by two worksheets, centered on how macronutrients are found in foods and are processed by the body. Students examined the regulation of nutrition labels and ingredients, and digestive physiology and the role of the gut microbiome in mental and general health. Nutritionally-related diseases including obesity, diabetes, and atherosclerosis were framed by considerations of health equity and the social determinants of health.

Program members participated in a weekly interdisciplinary lecture series exploring the COVID-19 pandemic entitled "Pandemic Academy." Evergreen faculty and guest speakers addressed topics

including community resilience; farm worker justice; social epidemiology; implications for people who are unsheltered, undocumented, and incarcerated; and ethical and historical lessons of pandemics. Students reflected on lecture content in weekly worksheets, and integrated their learning through blog posts and class discussions.

All class sessions took place remotely, primarily over Zoom; participants learned best practices for video-assisted group work, including self presentation, and how to manage an internet connection. The asynchronous portion of the program required facility with Canvas (course management software), and Hypothes.is (a collaborative annotation app). Students also were introduced to Slack (an online collaborative workspace).

EVALUATION:
Written by: Carolyn Prouty, DVM and Joli Sandoz, MFA, MA, MA

Zoë Ortega-Owen has completed a very successful first year at Evergreen in our program *Irrepressible Bodies*. She joined the program with a background in biology and specifically anatomy, and has a strong interest in becoming a health care provider. Zoë is an engaged, responsible, and hard-working student, an enthusiastic learner, and she participated fully in all of our activities. Over the year, Zoë demonstrated a solid understanding and application of the program content in her assignments, projects, and collaborative class participation. Zoë is to be commended for the strong growth she achieved in her confidence and skills as a thinker, writer, and learning community member over the past 9 months.

FALL: Zoë's writing in weekly papers was generally focused, providing straightforward explanations and applications of program concepts including socialization, transformational resilience and the cycle of liberation. Some of the topics we discussed in seminar, such as discrimination and oppression, were ones that Zoë had familiarity with, and she took advantage of the opportunity to learn more deeply about these topics, revising the draft versions of her essays, and adding observations of her learning in seminar that reflected her listening skills. Zoë's writing often demonstrated an ability to use evidence by bringing in specific details, and analyzing their relationship to the bigger picture. Zoë improved her use of evidence in creating cohesive arguments over the quarter. She can continue to work on the clarity of her prose, using direct language, and deepening the level of her analysis.

In anatomy and physiology, Zoë did excellent work overall, showing comprehension of the vast majority of the objectives on her examinations, vocabulary quizzes, and lab worksheets, and turning in all of her work on time. Her exam answers were extremely thorough, and she frequently correctly answered optional questions on her labs worksheets and exams that demonstrated comprehension of more advanced material. Zoë participated earnestly in in-class inquiries and workshop activities about the clinical applications of our learning. Her lab write-ups were of very good quality: complete, and mostly correct. In lab, Zoë was prepared, excited and engaged, and she particularly enjoyed learning about reproductive physiology.

For Zoë's Integrative Project, she chose to apply her thinking to the benefits that HIV/AIDS activists have brought to our society. Zoë drew on Donna Harro's cycle of liberation as her template for examining the ways that HIV/AIDS activists developed a sense of community that supported their actions for change. Zoë made some basic comparisons between the stages that Harro describes and the specific applications of how these appeared in the gay and lesbian communities early in the HIV/AIDS movement. Using a few drafts to develop her thinking, Zoë explored her ideas in her essay, taking her to the point where she created a colorful and artistic poster centering how HIV/AIDS activists have achieved liberation through their activist work. She did a good job presenting her poster to a small group of students and faculty in a mock "poster session".

WINTER: Zoë took full responsibility for her studies this quarter, attending all class sessions, completing every weekly paper assignment, and engaging in a process of draft and revision for her final project. In seminar and in class discussions, Zoë was usually well prepared, and participated readily in discussions within small groups. Though often quiet in larger class discussions, Zoë pushed herself to share in front of the larger group, to good effect, articulating her views clearly and directly.

Zoë's work overall in winter quarter documented very good comprehension of a number of key program ideas and concepts including the role of education in supporting resilience and social change, racialization and transformation as system-level processes, and the role of racism in creating health inequities. Zoë demonstrated good practical grasp of basic economic concepts including externalities and market exchange; she also paraphrased one of our readings when she wrote of the concept of the commons that "it is how the world is valued and shared." During her joint slide presentation with another program member, Zoë brought showmanship and humor to the work, as part of delivering a very well-prepared short talk during which she addressed the possibility of moving toward social equity via policy writing and effective storytelling.

Attendance at not just the required one but *four* nonprofit organizations' legislative days attested to Zoë's newfound interest in and good grasp of lawmaking process and personalities. She noted that her big takeaways from this work were "how to talk about a bill accurately" and "knowledge of who I'm talking to and how to talk to them." For one of her longer papers, Zoë wrote a mock bill with a sensible solution to the perennial underfunding experienced by a local tiny house village for formerly-unhoused individuals. Zoë decided that "it is the intent of the legislature to: consider the service and work that case managers provide to the Quixote Village as a health related cost that Medicaid will cover."

We'd like to commend Zoë in particular for another aspect of her studies of government: tracking through the legislative process a bill she disagreed with. She then wrote a paper thinking critically about the issue represented by the bill, from two opposed perspectives. Exercises in critical inquiry of this type can help to enlarge both one's thinking and one's empathy for the "other side," essential traits for conscientious participation in a democratic society. In addition, Zoë expressed her own conclusions clearly and with insight here and in weekly responses to program readings.

During this second quarter of the program, Zoë wrote three 3-4 page papers, and elected to use a critical thinking worksheet format to respond weekly to our readings. Her work in the longer essays and a shorter bill analysis was thoughtful, and at the same time somewhat uneven in terms of provision of evidence and data. Her reading notes, however, were well-structured and thorough. We'd like to encourage Zoë to work to support her strong insights and connections with enough backup to make all of her points persuasive to readers. Avoiding over-reliance on direct quotations also will enhance the clarity of her observations, which in themselves were well worth reading.

In anatomy and physiology, Zoë's work in winter quarter was again of excellent quality overall, demonstrating mastery of nearly every concept on her very thorough lab worksheets, vocabulary quizzes, and take-home examinations. On her exams, she showed outstanding understanding of the cardiovascular, respiratory, immune, and urinary systems in particular, and she frequently used strong physiologic reasoning to puzzle out applications of our learning. Zoë came well-prepared for lab, and was always enthusiastic, willingly working constructively with her colleagues during dissections. Her lab worksheets were of very good quality, mostly correct and very complete. Zoë clearly enjoys studying these topics, and she shared her excitement eagerly with her colleagues.

SPRING: In her spring quarter integrative blog posts and annotations of shared texts, Zoë demonstrated proficiency and increasing complexity in her critical thinking skills. Her best work was her analysis of the specific elements of the Olympia Food Bank that increase our community resiliency. She tied this to mutual aid and alternative economic solutions, and to the underlying structures that create the conditions

to support such solutions. At times, Zoë's writing was direct, well organized, and contained carefully constructed arguments. As she observed in her metacognitive analysis of her writing process, her thinking benefits from taking the time to come back multiple times to a subject or piece of writing. Zoë's confidence as a writer and thinker grew over these past three quarters, as was demonstrated by her increasing willingness to share her work with our learning community.

In epidemiology, Zoë did very good work through the quarter, demonstrating her increasing ability on her quizzes and homeworks to comprehend and state in plain language the meanings of the statistics that we calculated. Her strongest work was assessing measurements of risk, and she also showed good overall understanding of study design and measurements of disease frequency. Zoë demonstrated very strong work on interpretations of absolute and relative risk. She did very good work on calculating, understanding, and interpreting diagnostic test parameters including sensitivity, specificity, and predictive values. She will benefit from careful reading of questions and increased awareness of the magnitude of the answers: do her answers make sense? Zoë turned in all of her assignments, every one of them late, and persevered in her deep engagement with this material, frequently expressing how she valued its importance in media and health numeracy.

In our study of nutrition and nutritionally related diseases, Zoë did excellent work overall in her mastery of scientific concepts related to macronutrients, though both of her summative nutrition worksheets were turned in after the end of the quarter. Zoë mastered all of the concepts in the basics of digestive physiology, protein composition and digestion, as demonstrated on nutrition worksheets. She also showed a very strong understanding of lipids and carbohydrates in the body and in food, as well as the role of the microbiome in health. She correctly answered several advanced optional questions as well. Zoë engaged generously in our online seminars with her extensive annotations on two articles concerning obesity and mental health links to the microbiome.

Regarding health education, Zoë evidenced strong understanding of the practical importance of health literacy, analyzing COVID-19 induced tensions between Yakima, Washington, orchard owners and workers from the perspective that both groups acted from what they knew.

For her health education project, Zoë created an appealing picture book for young readers. Content focused on the contribution of dietary fiber to healthy digestion; "Gene the Bean and friends Irene and Darlene" and "Omar the Avocado," among others, joined forces to move digested food through the colon. Zoë relied on repetition of engaging images, and cadences and rhyming prose a la Dr. Seuss to draw readers in. She chose Microsoft PowerPoint as the software platform for the book, which worked well for her in-class presentation. Zoë's project process was practical as well as successful; she fit a complex and creative undertaking, including studying related lesson plans and reading research on educating children about food, into the time and resources available, while also realizing her goal of producing an accessible health education product. No small feat!

Zoë's informed metacognitive reflection indicated excellent awareness of her own (and by extension, others') learning process and associated concepts including goal setting, practice, progress monitoring (feedback loop), and growth mindset.

It was a joy to have Zoë in our program, and we wish her the very best in her future studies!

SUGGESTED COURSE EQUIVALENCIES (in quarter hours) TOTAL: 48

8 - Human Biology: Introduction to Anatomy & Physiology with Lab
5 - Introduction to Governance and Government Studies
4 - Introduction to Public Health
4 - Public Health: Introduction to Epidemiology

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4 - Introduction to Community Studies
3 - Introduction to Nutrition and Nutritionally-Related Diseases
3 - Introduction to Health Education
2 - Health Education Project: Children's Book
3 - Critical Health Literacy: Social Justice, Race and Dis/Ability Studies
2 - Pandemic Academy: Interdisciplinary Perspectives on COVID-19
4 - Practice of Critical Thinking
2 - Analytical Thinking and Writing
4 - Foundations of College Success

EVERGREEN

The Evergreen State College • Olympia, WA 98505 • www.evergreen.edu

EVERGREEN TRANSCRIPT GUIDE

Accreditation: The Evergreen State College is fully accredited by the Northwest Commission on Colleges and Universities.

Degrees Awarded: The Evergreen State College awards the following degrees: Bachelor of Arts, Bachelor of Science, Master of Environmental Studies, Master of Public Administration and Master In Teaching. Degree awards are listed on the Record of Academic Achievement.

Educational Philosophy:

Our curriculum places high value on these modes of learning and teaching objectives:

- Interdisciplinary Learning
- Collaborative Learning
- Learning Across Significant Differences
- Personal Engagement
- Linking Theory with Practical Applications

Our expectations of Evergreen Graduates are that during their time at Evergreen they will:

- Articulate and assume responsibility for their own work
- Participate collaboratively and responsibly in our diverse society
- Communicate creatively and effectively
- Demonstrate integrative, independent, critical thinking
- Apply qualitative, quantitative and creative modes of inquiry appropriately to practical and theoretical problems across disciplines, and,
- As a culmination of their education, demonstrate depth, breadth and synthesis of learning and the ability to reflect on the personal and social significance of that learning.

Our students have the opportunity to participate in frequent, mutual evaluation of academic programs, faculty and students. In collaboration with faculty and advisors, students develop individual academic concentrations.

Academic Program

Modes of Learning: Evergreen's curriculum is primarily team-taught and interdisciplinary. Students may choose from among several modes of study:

- **Programs:** Faculty members from different disciplines work together with students on a unifying question or theme. Programs may be up to three quarters long.
- **Individual Learning Contract:** Working closely with a faculty member, a student may design a one-quarter-long, full-time or part-time research or creative project. The contract document outlines both the activities of the contract and the criteria for evaluation. Most students are at upper division standing.
- **Internship Learning Contract:** Internships provide opportunities for students to link theory and practice in areas related to their interests. These full- or part-time opportunities involve close supervision by a field supervisor and a faculty sponsor.
- **Courses:** Courses are 2-6 credit offerings centered on a specific theme or discipline.

The numerical and alpha characters listed as Course Reference Numbers designate modes of learning and are in a random order.

Evaluation and Credit Award:

Our transcript consists of narrative evaluations. Narrative evaluations tell a rich and detailed story of the multiple facets involved in a student's academic work. A close reading of the narratives and attention to the course equivalencies will provide extensive information about student's abilities and experiences. Students are not awarded credit for work considered not passing. Evergreen will not translate our narrative transcript into letter or numeric grades.

Transcript Structure and Contents: The Record of Academic Achievement summarizes credit awarded, expressed in quarter credit hours. Transcript materials are presented in inverse chronological order so that the most recent evaluation(s) appears first.

Credit is recorded by:

Quarter Credit Hours:	Fall 1979 to present
Evergreen Units:	1 Evergreen Unit (1971 through Summer 1973) equals 5 quarter credit hours
	1 Evergreen Unit (Fall 1973 through Summer 1979) equals 4 quarter credit hours

Each academic entry in the transcript is accompanied by (unless noted otherwise):

- The Program Description, Individual Contract or Internship Contract which explains learning objectives, activities and content of the program, course or contract.
- The Faculty Evaluation of Student Achievement provides information on specific work the student completed and about how well the student performed in the program or contract.
- The Student's Own Evaluation of Personal Achievement is a reflective document written by the student evaluating his or her learning experiences. Students are encouraged but not required to include these documents in their official transcript, unless specified by faculty.
- The Student's Summative Self Evaluation is an optional evaluation summarizing a student's education and may be included as a separate document or as a part of the student's final self- evaluation.

Transfer credit for Evergreen programs, courses and individual study should be awarded based upon a careful review of the transcript document including the course equivalencies which are designed to make it easier for others to clearly interpret our interdisciplinary curriculum. These course equivalencies can be found at the conclusion of each of the Faculty Evaluation of Student Achievement.

The college academic calendar consists of four-eleven week quarters. Refer to the college website (www.evergreen.edu) for specific dates.

This record is authentic and official when the Record of Academic Achievement page is marked and dated with the school seal.
All information contained herein is confidential and its release is governed by the Family Educational Rights and Privacy Act of 1974 as amended.
If, after a thorough review of this transcript, you still have questions, please contact Registration and Records: (360) 867-6180.