MEMORANDUM

March 17, 2020

TO: Members of the Board of Trustees

FROM: Kristina M. Johnson, Chancellor

SUBJECT: Appointment of Distinguished Teaching Professor

Action Requested

The proposed resolution appoints Dr. Steven B. Broyles to the rank of Distinguished Teaching Professor at the State University College at Cortland.

Resolution

I recommend that the Board of Trustees adopt the following resolution:

Whereas the Board of Trustees has proudly established a historic tradition of acknowledging and honoring extraordinary faculty achievement through appointment to the Distinguished Faculty Rank; and

Whereas the appointment to the Distinguished Faculty Rank at the State-operated campuses is both a system-wide distinction and a promotion in rank; and

Whereas the SUNY Board of Trustees has the authority to bestow system-wide distinctions; now, therefore, be it

Resolved that the faculty member listed below be, and hereby is, promoted to the rank of Distinguished Teaching Professor at the State-operated campus indicated, effective March 17, 2020:

Professor Steven B. Broyles, State University College at Cortland

Background

The Distinguished Teaching Professorship recognizes and honors mastery of teaching. For individuals to be recognized as a SUNY Distinguished Teaching Professor, candidates must have demonstrated consistently superior
mastery of teaching; outstanding service to students and commitment to their ongoing intellectual growth, scholarship and professional development; and adherence to rigorous academic standards and requirements.

Further, to be eligible for nomination, a faculty member must have attained and held the rank of full professor for five years, have completed at least three years of full-time teaching on the nominating campus, and must have regularly carried a full-time teaching load as defined by the campus at the undergraduate, graduate, or professional level.

A brief summary of the candidate’s accomplishments follows:

**Professor Steven B. Broyles** – Dr. Broyles, Professor in the Department of Biological Sciences at SUNY Cortland, has devoted nearly thirty years to honing his model of integrated research in teaching. Known for his deep insight into milkweed reproduction, Dr. Broyles works to incorporate research experiences across the wide range of courses he teaches; from Introductory Biology to specialized upper-division and graduate courses in the major, including topics such as Field History and Field Ornithology. Demonstrating an extraordinary ability to engage with students, both in the classroom and in the field, Dr. Broyles has mentored over forty innovative undergraduate research projects including work on birch leaf stoma, trillium reproduction, urban forests, partridgeberry and lichen diversity, thrush migration, carbon storage in trees, Native American trail-marker trees, and jack-in-the-pulpit species identification. In addition to his teaching at SUNY Cortland, he volunteers his expertise to garden clubs, retirement centers, YMCAs, and nature centers, and he teaches high-school science teachers at the Raquette Lake facility in the Adirondacks, using the surrounding environment as his classroom. Dr. Broyles has received the SUNY Chancellor’s Award for Excellence in Teaching and the SUNY Cortland Rozanne Brooks Dedicated Teaching Award.

A copy of the nominating letter from the campus president is attached. The complete dossier is available in the Office of the Provost and Senior Vice Chancellor.

Attachments
January 10, 2020

SUNY Provost
SUNY System Administration
State University Plaza
353 Broadway
Albany, New York 12246-2915

On behalf of SUNY Cortland, I am very pleased to place the name of Dr. Steven B. Broyles in nomination for the rank of Distinguished Teaching Professor at the State University of New York College at Cortland.

Dr. Broyles received his B.S. in Biology from University of North Carolina at Charlotte, his M.S. in Botany from the University of Georgia, and his Ph.D. in Botany from the University of Georgia. He joined the SUNY Cortland Biological Sciences Department faculty in 1992, achieving the rank of Associate Professor in 1997 and full professor in 2004.

Numerous awards confirm Dr. Broyles’ excellence across all areas of his career. He was the recipient of the Excellence in Teaching Award in 1992, the Sigma Xi Outstanding Ph.D. Dissertation Award in 1993, and the Anderson Memorial Research Award in 1995 at the University of Georgia. He was awarded the SUNY Chancellor’s Award for Excellence in Teaching, State University of New York in 2002 and the Rozanne Brooks Dedicated Teaching Award in 2012.

Dr. Broyles has taught a wide array of courses from first-year general-education courses in Biology to undergraduate and graduate courses in the major. He is acknowledged by many students and advisees as the “best teacher” they have ever had, and peers “respect and applaud” his reputation.

EVIDENCE IN SUPPORT OF TEACHING TECHNIQUES

Few professors attain the consistent affirmation and admiration expressed by students, advisees, and colleagues for Dr. Steven Broyles. He is recognized in every area for his high standards, mastery in teaching, genuine care for students, and scholarly ability. He is also noted for collaboration with and mentoring of students and is widely recognized for his integrity and commitment to excellence. Support letters from students, advisees, and colleagues, along with stellar course-teacher evaluations over the years, consistently affirm superior achievements, support and mentoring of students, and high standards and genuine interest in all students.
Dr. Broyles consistently achieves ratings of 4.8-5.0 (on a 5.0 scale) on his Course Teacher Evaluations (CTEs) for courses taught at all levels. In the nine different courses he has taught in the past 27 years, student comments have been consistent. Dr. Broyles is “inspirational,” “caring,” “dedicated and devoted,” “attentive,” “thoughtful,” and “constructively critical.” Students feel “free to ask questions” and are “at ease and respectfully challenged in his presence”; as one student also stated, “He poses questions to my questions!” They describe Dr. Broyles as an “advisor,” “mentor,” and “true scientist.”

Dr. Broyles asks his students to observe, to think, to interpret, and to share. Everyone who knows Dr. Broyles knows that within the first two weeks of the semester he will know the names of each of his students as well as something about them, and this is the case in all the courses he teaches, including those with more than a hundred students. As a result, students become important participants in what quickly becomes a “mutually engaged community,” where not just attendance, but participation is also expected. During a classroom observation by a colleague, Dr. Broyles called on students by name and was able to pull students into the conversation because of his awareness of their experience growing up tapping maple trees. The colleague remarked, “it was an absolute pleasure to be in a classroom with a professor who was so comfortable, so fully present, so excited to be there.” Knowing and caring about his students in this manner allows him to find “sparks of interest” by following up on their questions, which often leads to further discussion, independent projects, extra reading by him and the students, and continued and lasting connections. Dr. Broyles “actually and genuinely cares about his students and how well they do in the course.”

The various courses Dr. Broyles teaches attract a wide-range of students, requiring him to modify his approach in order to meet the students where they are as well as to take them where they want to be. He makes learning both fun and meaningful. Students may arrive at a classroom with interesting and curious drawings on the board and are presented with a simple, concise, expertly paced power-point presentation, allowing ample time for notetaking and clarification. Problems are posed and examples are used to encourage students to think and become engaged. Challenging information becomes easy to understand. When exam time approaches, students will arrive finding a power-point loop of possible exam questions and will be presented with potential essay questions more than a week prior. He asks much from his students and, as a result of the rapport he maintains with the class as a whole as well as with individual students, students are willing and able to “step up their game.” As a colleague has observed, “Dr. Broyles stimulates their interest and challenges their intellect.”

As another colleague has noted, Dr. Broyles “understands that students learn best by actually observing and experiencing interactions with the content” and “enthusiastically goes into the field.” Since the beginning of his career at SUNY Cortland, Dr. Broyles has sought out and delivered “the highest quality learning experiences for students in the traditional classroom, in his laboratory, and in outdoor field-oriented classrooms” throughout and beyond New York as well as internationally. He has “committed himself to making certain students are provided with extra-curricular experiences that add significant value to their Cortland education.” “Many students (especially those from the city) have their first taste of hiking, kayaking and field research” that “will lead to a lifetime of appreciation for the natural world and its conservation.”
Dr. Broyles' excellence in teaching has been recognized and publicly acknowledged for more than a decade, both as the recipient of the Chancellor's Award for Excellence in Teaching in 2002 and as the Rozanne Brooks Dedicated Teacher Award in 2012. Whether one examines the quantity or quality of his teaching, inside or outside the traditional classroom, on or off campus, solo or cooperatively, as one student notes, one will find in Dr. Broyles an "outstanding and incredibly personable" model instructor, and he has been that for more than 27 years.

As stated above, Dr. Broyles' CTE scores are remarkably high, ranging from 4.8-5.0 (on a 5.0 scale) with an average of 4.81 in the period from 2013 to 2019. The student comments on these evaluations are evidence of Dr. Broyles' ability not only to engage his students in the work of the class but also to bring his students to an appreciation of biology that extends beyond the classroom and the semester. Students call his courses "stimulating" and "challenging" with one student saying that his introductory biology course was the "most informative and well-presented course [he has] ever been enrolled in." A non-major from this same course in another year says, "Broyles is one of the great teachers you hear about that influences you in a big way. If I had taken this class earlier in my education I most likely would be a biology major." A second calls Broyles "a great teacher, [who] really has impacted [his] life here at SUNY Cortland." The influence that Dr. Broyles has on his students is the most striking characteristic of his teaching that emerges from the comments on his CTEs. Semester after semester, course after course, students praise how much Professor Broyles cares about them and their learning, calling him "compassionate" and "motivating." In his upper-division/graduate Field Natural History course, a student sums it up this way:

I especially enjoyed this class because I felt like Dr. Broyles genuinely cared about my understanding of the material and wanted me to be successful. I absorbed more of the material than I realized and wish I had more time to take another class with him. He is also great at getting students interested in topics that don't seem interesting at the get-go. One of the most effective professors I've had during my time at Cortland.

Many students comment on Dr. Broyles' commitment to getting to know his students and on his investment in their success. Dr. Broyles, as one student put it, "genuinely cares" for his students and wants them to succeed, and this commitment to their success is clearly paying dividends in his classroom. The final trend that emerges from these comments is how often Dr. Broyles inspires his students to continue their engagement with the subject after the course has ended. This is particularly evident in his ornithology course, with one student commenting, "I am so glad that I decided to take this class because it has showed me one of my true passions in life and has given me motivation to learn more on my own. Thank you, Dr. Broyles!" Another student writes, "this class got me excited about birds and now you will be finding me in my backyard with my binos, looking at birds and figuring out what they are." His students' responses are best expressed in this comment: "Thank you for putting so much time and effort not only into your lectures for class, but into your students themselves. We appreciated it. Your enthusiasm for biology is contagious."

Dr. Broyles' commitment to the teaching of biology extends beyond his SUNY Cortland classroom and into the surrounding community. Since at least 1999, Dr. Broyles has conducted
nature walks, presented workshops, and led seminars for various garden clubs, schools, retirement centers, YMCAs, and nature centers throughout central New York. These include lectures on the “Sexual Secrets of Woodland Herbs” for the Onondaga Audubon Society and the Town and Country Garden Club, “Attracting Birds and Butterflies to Gardens” for the Homer Garden Club, “Sexual Secrets of your Produce” to the Onondaga Audubon Society, and “Sexual Secrets of Woodland Herbs” to the Finger Lakes Native Plant Society. He has twice co-taught a community Field Ornithology course at the Lime Hollow Nature Center in Cortland County and has served on their board. Perhaps most impressive is the community service work that he has done with his students in the form of tree surveys of SUNY Cortland, the city of Cortland, and the town of Homer. These surveys were then shared with the municipal stakeholders, helping them to secure funding to improve their communities. In short, Dr. Broyles is a public academic who is committed to enhancing education not only on the SUNY Cortland campus but also throughout the surrounding region.

In his nominating letter, Dr. Robert Darling says of Dr. Broyles’ off-campus teaching:

I’ve had the pleasure of working with Steve as part of the Master Teacher Summer Science Program at Raquette Lake. I have observed him directly engaging, teaching, and leading instruction to NYS High School Science teachers in the outdoors. In this environment, Steve is the master craftsman; he asks teachers to observe and share their observations, asks them to think and share their thoughts, asks them to interpret and share their interpretations. Such a teaching style in the field will only result in better prepared and more dynamic high school science teachers, so his impact on science education as a whole is far-reaching.

EVIDENCE IN SUPPORT OF SCHOLARSHIP AND PROFESSIONAL GROWTH

Dr. Broyles has amassed an excellent record of scholarship and achievement in the field of Biological Sciences. Most of his research is in the area of evolution and reproduction in Milkweeds (genus Asclepias); however, he has also conducted important work in the genus Trillium. Of Dr. Broyles’ 27 peer-reviewed journal articles, at least twenty papers deal with various aspects of Milkweed reproduction. The same is true of his two recently (2019) submitted manuscripts. Furthermore, of Broyles’ 29 published or in-review papers, 17 are first authored by him, and six have undergraduate student co-authors. A Google Scholar search in December 2019 reveals that three of Broyles’ peer-reviewed papers have greater than a hundred citations, one of which has greater than two-hundred citations.

In the mid-1990s, Dr. Broyles received a $65,000 grant from the National Science Foundation (NSF) to study Gene Flow and Hybridization in Milkweeds. More recently, in 2016, Dr. Broyles was a co-principle investigator on a successful $1,000,000 NSF grant to examine the Development of Genetic and Genomic Resources for Milkweed, Asclepias syriaca and Asclepias curassavica, with colleagues at Cornell University. One of them, Dr. Anurag Agawal, of Cornell University, describes Dr. Broyles as “one of the deans of milkweed reproductive biology, a
scholar known for deep insight into the biology of these fascinating plants.” Dr. Agawal further states that Broyles’ “solo-authored study published in 2002 (10 years after arriving at SUNY Cortland) in our flagship society journal, *Evolution*, is a classic that set the standard and will surely be revisited by future generations.” Additionally, Dr. Allen Strand, of the College of Charleston, states that Dr. Broyles’ “work on mating systems in milkweeds in the 1990s has been central to the field’s broader understanding of the evolution of plant reproduction and these papers are very well cited.” Lastly, regarding Dr. Broyles’ early work on male reproductive success in milkweeds, Drs. Christopher Ivey and Adrienne Edwards, both of the California State University, Chico, observe that “his experiments to test [Bateman’s Principle] are regarded as classic papers in evolutionary biology.”

As an example of his commitment to the integration of teaching and scholarship, Dr. Broyles has had over forty different students involved in undergraduate research projects here at SUNY Cortland since the late 1990s. Many of these projects have been presented at SUNY Cortland’s annual *Transformations* research event. Furthermore, Dr. Broyles has served as an *Honors Thesis Mentor* to two undergraduate students. The topics investigated by all of the students referred to above go well beyond Dr. Broyles’ traditional milkweed research, and include various work on birch tree leaf stoma, trillium reproduction, urban forests, partridgeberry and lichen diversity, thrush migration, carbon storage in trees, native American trail-marker trees, and jack-in-the-pulpit species identification. The great number of students involved is noteworthy not only because of the time that Dr. Broyles dedicates to each student, but also because it is volunteered time, on top of his normal classroom commitment. These undergraduate research experiences are one of the most tangible ways by which a faculty member can affect and influence future scientists; it is a measure of Dr. Broyles’ outstanding dedication to scholarly development of students at SUNY Cortland.

**CONCLUSION**

The Nominating Committee’s thorough review of Dr. Broyles’ teaching record confirms his worthiness of being promoted to the rank of Distinguished Teaching Professor. The evidence clearly confirms his extraordinary skill as a consummate instructor, caring mentor, and recognized expert in his field. His superb teaching is deeply rooted in his intellectual expertise and unwavering commitment to student success.

Dr. Broyles constantly endeavors to make complex content accessible to all students. He helps students to develop learning skills that enable achievement. Student testimonies go beyond course teacher evaluations to heartfelt statements of his powerful effect on their lives and careers. A 2017 Biology major, now master’s candidate in Binghamton University’s Geography and GIS program, confirms Dr. Broyles’ resolute commitment to preparing her “and countless other students, for higher learning and careers beyond SUNY Cortland.” She writes:

My first class with Dr. Broyles, Ornithology, remains to be one of the best courses I’ve ever taken. Through his teaching, I learned what a passion for biology looked like, and it couldn’t help but rub off on me. With a combination of classroom and field study, he taught us to be observant of our surroundings, and be critical thinkers. When studying about the physiology of the wing, Dr. Broyles taught us the specifics with well-prepared
lectures, then let us learn hands-on with taxidermic samples, and finally, had us read and present current literature on the topic. In this way, information was offered in multiple formats and was allowed to sink in. What we didn’t realize at the time, was that not only were we learning about the skeletal structure and evolutionary history of the bird wing, but we were learning how to think and read critically, and how to organize and present information in front of a group.

Based upon the evidence provided, I am confident that Dr. Broyles meets or exceeds the criteria for this prestigious award. For the reasons mentioned above, I am very pleased to recommend Dr. Steven B. Broyles for promotion to the rank of SUNY Distinguished Teaching Professor.

Yours truly,

Erik J. Bitterbaum, President