ITEMS FOR DISCUSSION AND ACTION\ACADEMIC AND PERSONNEL

March 17, 2021

ACTION: Approve Program Review Recommendations

Per Policy 4200, existing academic programs shall be reviewed every seven (7) years by each College to determine the quality and effectiveness of each program, the efficiency with which each is delivered, and to avoid unnecessary duplication. Each program is evaluated based on the minimum threshold requirements established by the Coordinating Commission for Postsecondary Education (CCPE). Below are the academic programs that have been successfully reviewed for the 2020-2021 academic year and currently meet the minimum CCPE thresholds, along with the subsequent recommendations for continued offering of each.

Chadron State

- Biology/Health Sciences continue program
- Communication Arts continue program
- Rangeland Management continue program
- Social Work continue program

Peru State

- Liberal Arts continue program
- Natural Sciences continue program

Wavne State

- Communication Studies continue program
- Computer Information Systems continue program
- Life Sciences continue program

The System Office recommends approval of the Program Review Recommendations.

ATTACHMENTS:

- 2021 CSC Biology Health Sciences Existing Program Review Report (PDF)
- 2021 CSC Communication Arts Existing Program Review Report (PDF)
- 2021 CSC Rangeland Management Existing Program Review Report (PDF)
- 2021 CSC Social Work Existing Program Review Report (PDF)
- 2021 PSC Liberal Arts Existing Program Review Report (PDF)
- 2021 PSC Natural Sciences Program Review Report (PDF)
- 2021 WSC Communication Studies Existing Program Review Report (PDF)
- 2021 WSC Computer Information Systems Existing Program Review Report (PDF)
- 2021 WSC Life Sciences Existing Program Review Report (PDF)

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CSC Existing Program Review Report 2021 Biology and Health Sciences

1. Section One: Overview of Program Offerings

Major	Teaching Endorsement	Option	Minor	Degree	Credits
Biology	Biology Education Subject Endorsement (7-12) - 36			BSE	43-45
Biology		Biological Resources		BS	55-61
Biology		General Biology		BS	56-61
Biology		Human Biology		BS	57-61
Biology		Molecular Biology		BS	57-61
Biology		Organismal Biology		BS	57-61
Biology			Biology		21
Biology			Human Biology		20
Biology			Organismal Biology		20-21
Biology			Plant Sciences		20

Major	Teaching Endorsement	Option	Minor	Degree	Credits
Health Sciences		General Health Care		BS	56-64
Health Sciences		Pre-Chiropractic Medicine		BS	66
Health Sciences		Pre-Optometry		BS	66
Health Sciences		Pre-Pharmacy		BS	74
Health Sciences		Pre-Veterinary Medicine		BS	68
Health Sciences		Radiologic Technology		BS	45

These programs are not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

Overview:

Biology at Chadron State College is administratively housed within the Department of Mathematical and Natural Sciences which is found within the School of Business, Mathematics, and Science. Five full-time faculties are assigned to biology. Biology is a diverse subject. The program focuses on cell, plants, animals, and human biology and serves to assist with the Rural Health Opportunities Program (RHOP) associated with the University of Nebraska Medical Center.

Regional Need and Demand for Program:

The program produces graduates who are successfully pursuing careers in health professions, veterinary medicine, research science, and ecological and environmental biology. The faculty in the

biology program are focused on providing a biological education, aligned to national standards that prepares students with the skills, knowledge base, and character for their chosen careers.

The number of majors in Biology and Health Science throughout the 2015-2020 fall semesters averages approximately 195 students in biology. The program averaged 17 graduates per year over this five-year period.

The numbers of declared majors and graduates do not include students who declare a pre-professional program (i.e., pre-nursing, pre-clinical laboratory sciences, pre-radiologic technician) as these students are generally non-degree seeking. These students do enroll in the major courses and are an important part of fulfilling our commitment to meet the health care needs of rural Nebraska.

Efficiency of Offerings:

The faculty in the biology program are focusing their efforts on retention in freshmen courses, after noticing the decline of graduates and overall students in our program. The year to year retention data shows that between the freshman and sophomore years in college at Chadron State is when a majority of the students are leaving the biology program. The faculty are focusing on updating the biology curriculum to meet the needs of the incoming students based upon their knowledge of the biological sciences. Faculty are also updating curricular options to better match graduate and professional school entrance requirements, to allow for transferability, to align with national standards, and the institution's goals stated in the Master Academic Plan.

Findings from Review:

There has been a noticeable decline in the graduation and retention rates. In looking more closely, the trend of losing students between their freshman and sophomore years emerged. We looked at our freshmen courses' D/F/W/I rates, and noticed that they are significantly higher. As a program we plan to address this by changing our curriculum. Currently the freshman courses include Botany and Zoology. Knowing that we are an open enrollment institution, and thus have freshmen with a wide variety of science backgrounds, we thought it wise to start back at the basics with BIO 101 and 102 courses. These courses will focus on the fundamentals of Biology. Bio 101 will cover the cell and tissues. Bio 102 will cover the five kingdoms. These changes to the freshman year will provide a firm foundation for all students in the program. It has been shown that students who have success early on tend to stay in a program. These changes should also provide the students these early successes and improve the freshmen to sophomore retention rates. Even a modest improvement in the freshmen to sophomore retention rates will increase the graduation rates.

Summary:

The Biology discipline is integral to the success of western Nebraska. It is providing education leading students toward much needed careers in rural health care, environmental resource management, science education, and molecular biology/research careers. The Biology/ Health Science programs strive to closely align with the institution's role, mission, and vision to serve the region of Western Nebraska.

Program Resources

Faculty and faculty-related resources:

At this time our faculty staffing is sufficient for the courses offered and the number of students currently enrolled. With the renovation of the Math/Science building (completion date projected to be

Spring 2022) and the revision of our curriculum, we are expecting enrollment to grow. At that point the need for additional faculty members will need to be assessed.

Informational resources (library, technology, data services, etc.):

It has come to our knowledge that the data bases in the library are being cut due to budget constraints. This will greatly impact our ability to teach our courses. Each one of the biology courses has a research paper component. Several of the courses (evolution and our capstone) rely heavily on these resources as they are completely research paper based.

Fiscal resources:

The following requests would support the continuation and growth of the program:

- Continued funding of the Donor body program. This program allows our students to learn
 anatomy not in single parts, but how each part is interconnected and works together. The
 students that have been through this program perform very well in their professional school. It
 is also a great recruitment tool. The donor body program is often the deciding factor in coming
 to CSC for our biology students.
- 2. Updated microscopes. Many of the microscopes still in use in our department are the original scopes purchased when the math and science building opened (1970). They are not user-friendly, are in disrepair, function poorly and degrading quickly. These microscopes are used in every class we offer, and by every student in our program. In order for new scopes to last longer, we would request a classroom set for each lab.
- 3. Physiology equipment for plants. Physiology equipment for plants, which would be used in Ecology, Botany, Plant Physiology and other plant science classes (potentially including Rangeland plant classes, student research and by the High Plains Herbarium). Water relations measures are appropriate for studying drought and water interaction conditions, for example. Our lack of physiology equipment makes our plant physiology lab much less than it could be, and we have limited ability to do field work in climate change except for tracking species distribution changes (which is very important and we lead the high plains in doing this, thanks to the work of Steve Rolfsmeier).
- 4. A full time Lab assistant for maintaining living cultures and specimens for laboratory learning, assistance with culture prep for student labs/research, prepping solutions for student labs, gathering specimens, maintaining supplies for lab. This person could also assist the instructors by conducting make-up labs for students that miss their labs (e.g. athletics participation, Covid, other school functions).
- 5. Funding for undergraduate research. There has been a large push in undergraduate institutions over the past 5 years for getting undergraduate students involved in research throughout their undergraduate education. Currently the opportunity for student research in the biology program is very limited due to funding. We would need funding for supplies to conduct the research and to pay the faculty that would be overseeing the student research.
- 6. To replace and add a few anatomical models. The current models are in shambles with missing and broken parts from years of use. These models are in desperate need of replacing. There are also models where certain parts cannot be easily seen on the donor bodies. These models

would need to be purchased. There are also too few models per students. The current ratio is about 1 model per 8 students. This makes it very difficult for students to study in class and often must put in substantial hours outside of class to have access to the models. A preferred ratio is 1 model per 2 students.

- 7. A greenhouse to grow and store live plant specimens used in laboratory classrooms, student research, the High Plains Herbarium, and potentially Rangeland courses. Some of the plants used are not easily purchased or rare specimens. Funding for a student worker/release time for a faculty member to maintain these plants would also be needed.
- 3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/Awards in Program		SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH	l)	2,867	2,352	2,299	2,042	1,942	2,300.4
Faculty Full-time Equivalency (FTE)		5.8	5.63	5.05	4.55	5.05	5.22
SCH/Faculty FTE		494.31	417.76	455.25	448.79	384.55	440.13
Number of Degrees and	BS	20	15	15	15	20	17
Awards	BSE	1	0	0	1	0	.4
(list degrees/awards separately)	BS (Health Sciences)	3	0	1	0	0	.8

Note: Biology and Health Sciences are two separate majors. However, they have been combined into one comprehensive program review based on the following factors:

- 1. The courses used for the Health Sciences degree are ones that are also utilized in the Biology degrees (BS in Biology and BSE in Biology Education); therefore the SCH and FTE counts make sense to combine. Both academic programs are housed within the Biology Department.
- 2. Few students who select the Health Sciences degree actually graduate from CSC; instead, they transfer to another institution, such as UNMC (RHOP program) prior to graduating and do not take advantage of the opportunity to reverse transfer credits back to CSC to complete the degree. Currently, CSC's five year mean for Health Sciences graduates is .8, which falls below the CCPE threshold, with the Biology mean at 17.4 graduates.

CSC Existing Program Review Report 2021 Communication Arts

1. Section One: Overview of Program Offerings

Major	Option	Minor	Degree	Credits
Communication Arts	Interpersonal Communication		BA	51
Communication Arts	Journalism		BA	54
Communication Arts	Public Relations		BA	54
Communication Arts		Interpersonal Communication		21
Communication Arts		Journalism		21
Communication Arts		Public Relations		21

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

There are ample illustrations of why there remains a need for CSC to have a Communication Program. Throughout this report you will see confirmations of necessity including: geographical location, skills, contribution, high-impact learning and significance to the CSC Mission.

The first validation for the Communication Program is due to the location of Chadron State College. CSC remains the only four-year school to offer Communication courses in the western area of Nebraska. The next closest four-year institution in Nebraska to offer Communication classes would be the University of Nebraska at Kearney which is five hours away from Chadron.

The second justification for the Communication Program at CSC is the continual need for students to be able to speak and write well, both in their personal and professional interactions. Communication abilities continue to be a core skill valued and required for all future employees. Whether a student is majoring in Rangeland Management, Criminal Justice or Biology (or any other major for that matter) students need to be able to communicate efficiently and effectively. In addition to the professional need for communication, our program additionally offers courses to improve and strengthen personal relational competencies. These courses include: Interpersonal Communication, Nonverbal Communication, Conflict Resolution and Mediation, and Relational and Family Communication.

A third rationale for the Communication Program is the amount of contribution that the CA Program brings to Chadron State, both in undergraduate and graduate studies. In regards to undergraduate, Communication courses are strong succors in the Essential Studies Program. Communication courses are offered in several categories of the Essential Studies Program including: First Year Inquiry (FYI), Essential Studies #3, Essential Studies #9 and Essential Studies #10. In relation to graduate studies, the Communication Program provides numerous courses geared toward the Master of Science in Organizational Management. Additionally, while there is not a Master's in Communication, Communication faculty often advise graduate students and/or serve on graduate students' committees.

The fourth need for the Communication Program includes how the program aids in the Chadron State College Mission and utilizes high-impact learning. As per the CSC website, "Chadron State College delivers experiences that foster knowledgeable and engaged leaders and citizens to enrich the High Plains region and beyond" (https://www.csc.edu/about/accreditation/index.csc). Within the Communication Program there are numerous classes that correlate with the mission. For example, in Event Planning and Leadership, students volunteer each semester with The Big Event (www.csc.edu/thebigevent). Furthermore, high-impact learning occurs in classes including (but not limited to): News Journalism, Communication Campaigns, and Editing and Design.

In closing, as you go through the additional CCPE documentation, you will understand why the Communication Program remains an asset to CSC. The Communication faculty take great pride in achieving student learning outcomes, implementing high-impact practices and contributing to both the Chadron campus and community.

Program Resources:

Faculty and faculty-related resources:

The Communication faculty are short one tenure-track faculty line.

<u>Informational resources (library, technology, data services, etc.):</u>

Several years ago, the Communication and Mass Media library database was cut. It would be very beneficial to have this database back for both faculty and students:

(https://www.ebsco.com/products/research-databases/communication-mass-media-complete).

Physical facilities and instructional equipment, if applicable:

If the Communication program expands to include a Media Production option, we will need a media production lab & studio space. In addition, we will need a faculty member to teach these courses and production resources including but not limited to: cameras, microphones, tripods, computers, etc.

Fiscal resources:

Significant fiscal assistance would be needed to incorporate the Media Production option.

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/A	SCH/FTE	
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		2,548	1,959	1,748	1,611	1,609	1,895
Faculty Full-time Equivalency	(FTE)	5.25	4.88	4.88	4.63	4.5	4.83
SCH/Faculty FTE		485.33	401.43	358.20	347.95	357.56	390.09
Number of Degrees and Awards	BA	11	10	7	7	9	8.8
(list degrees/awards separately)							

Location Need:

The Communication program at Chadron State College continues to be the sole four-year degree program offered in the Panhandle of Nebraska. The University of Nebraska at Kearney would be the next closest four-year NE school which is located in Central Nebraska (several hours away from the Panhandle). In regards to out-of-state institutions and locality, Black Hills State University in Spearfish, SD is located in the Black Hills of South Dakota.

Skills Need:

Stated directly, communication skills are needed. As the National Communication Association states, "The ability to communicate is one of the most highly sought skills by employers. In fact, the 2018 National Association of Colleges and Employers (NACE) survey of 201 employers found that the knowledge and skills taught in Communication courses are essential to being hired, regardless of one's major," (https://www.natcom.org/academic-professional-resources/why-study-communication).

CSC Contribution Need:

The Communication program at CSC provides both undergraduate and graduate classes. For example, the CA program contributes significantly to Essential Studies. The Communication program has CA courses in the First Year Inquiry (FYI), in ES #3, ES #10 and two recently developed courses for ES #9, Event Planning & Leadership and Constructing Digital Citizenship. In relation to graduate studies, the CA program offers numerous courses for the Masters of Science in Organizational Management. Two courses (out of several) include: Research Process & Practice and Organizational Communication.

CSC Mission & High-Impact Learning Need:

The Community program continually keeps the CSC Mission & MAP (Master Academic Plan) on the forefront. As the CSC mission statement states, "Chadron State College delivers experiences that foster knowledgeable and engaged leaders and citizens to enrich the High Plains region and beyond." The Communication program and faculty take great pride in this mission through high-impact learning such as the student newspaper, *The Eagle* and The Big Event. *The Eagle* newspaper has continued its success as the Best Overall Newspaper in the Northern Plains Collegiate Media Association, first place, 2011-2020. In relation to The Big Event, (www.csc.edu/thebigevent) this student-led day of community service continues to grow and foster new community relations. In 2018, The Big Event expanded to host a Mini Big Event, every fall. Thus, now serving the community both in the fall and spring semesters. Both *The Eagle* and The Big Event are incorporated in high-impact learning CA courses (Event Planning & Leadership and News Journalism and also serve as internship opportunities for numerous students annually.

Alumni Post-Graduation Information:

Graduates from the Communication program succeed in the real-world in a variety of ways. Put simply, the majority of our students become employed and/or go on to graduate school. For instance, alumni currently are in graduate studies including at: The University of Nebraska Omaha, Purdue University, Northeastern Illinois University and Chadron State College. In addition, several have graduated with a graduate degree including from: Chadron State College, the University of Central Missouri and Tulane University.

In regards to the workforce, Communication program alumni are employed locally, regionally and nationally. Locally, CSC continues to be an employment opportunity, specifically for Admissions. Regionally, alumni are working in educational settings including: Western Nebraska Community College and the Scottsbluff and Bridgeport Public School Systems. Additionally, several alumni are working at

regional hospitals including Box Butte General Hospital and St. Franciscan Healthcare. Nationally CA alumni are in a variety of positions including (but not limited to) marketing in Washington and athletic communications in Oregon.

In closing, the Chadron State College Communication program is currently in the initial stages of proposing two new Communication options: Health Communication (in lieu of Interpersonal) and Media Production. With the necessary resources (production equipment, studio space, an additional faculty line, etc.) the Communication faculty believe these program options/revisions will make the program even stronger and more marketable and appealing.

CSC Existing Program Review Report 2021 Rangeland Management

1. Section One: Overview of Program Offerings

Major	Option	Minor	Degree	Credits
Rangeland Management	Rangeland Ecology		BS	57
Rangeland Management	Rangeland Equine Management		BS	57
Rangeland Management	Rangeland Fire Management		BS	54
Rangeland Management	Rangeland Livestock Management		BS	55-56
Rangeland Management	Rangeland Wildlife Management		BS	57
Rangeland Management		Agriculture Plant Science		20
Rangeland Management		Animal Science		20
Rangeland Management		Equine Management		21
Rangeland Management		Rangeland Management		21
Rangeland Management		Veterinary Science		19
Rangeland Management		Wildlife Management		21

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

The Rangeland Management program provides students with the opportunity to earn a Bachelors of Sciences Degree in Rangeland Management. It is a comprehensive degree with students taking a core curriculum of 36 credit hours plus a selected option of an additional 18 to 21 credit hours. At this time there are five options: Rangeland Ecology, Rangeland Wildlife Management, Rangeland Equine Management, Rangeland Livestock Management, and Rangeland Fire Management. Rangeland Fire Management is a 2 + 2 program with Casper Community college in Casper, WY. The majority of students are found within the Rangeland Wildlife and Rangeland Livestock options.

Regardless of option all students graduating from the CSC Rangeland Management program are qualified for the 454 hiring series. The 454 series production is used as a standard by the Range Sciences Education Council (RSEC) and the North American Range University Program Leads (NARUP) to compare programs. Over the past 3 years CSC has continued to produce more 454 qualified graduates than nearly all programs with a Rangeland Management degree on the books. Part of this is due to a reduction of true range degrees with many being restructured to be more broad "natural resources management" type degrees; which results in a removal of course from degree paths that are required for 454.

At CSC we have continued to update our catalog while maintaining alignment with the 454 benchmark. Total enrollment, again looking at RSEC and NARUP data, in the rangeland management program continues to outpace the majority of institutions offering a rangeland management degree, including the accredited programs of land grant institutions. The addition of the career scholarship program in 20 – 21 has created some additional optimism within the program. It is expected that Career Scholarship program will result in increased recruitment of new students into Rangeland Management and the retention of current students.

Enrollment within the program has remained steady over the past five years continuing at a higher level than the years prior, taking into account the slight reduction in total student credit hours in 19-20. Current full time FTE remains above 4.0. The ongoing search for the 20-21 year has put the program in a position in which the FTE of 5.09 is being taught by three full time faculty and two adjuncts. Adjuncts currently teach a total of 15 credit hours combined. This puts a significant additional load on current full time faculty. Furthermore, a limited adjunct pool puts significant pressure on the search committee to successfully fill the vacancy prior to the fall of 2021.

Program Resources

Faculty and faculty-related resources

The Department is currently working to fill the position vacated Spring of 2020; search is ongoing but additional resources may be needed to improve the applicant pool

<u>Informational resources (library, technology, data services, etc.):</u>

Resources are sufficient

Fiscal resources:

Resources are sufficient

3. <u>Evidence of Demand and Efficiency</u> (per established CCPE standards for 5-year means)

Number of Degrees/Awards in Program		SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		3,086	3,258	2,877	2,802	2,683	2,941.2
Faculty Full-time Equivalency (FTE)		5.3	5.39	4.51	4.64	5.09	4.99
SCH/Faculty FTE		582.26	604.45	637.92	603.88	527.11	591.12
Number of Degrees and Awards	BS	25	24	28	21	25	24.6
(list degrees/awards separately)							

In the past five years student hour production has declined slightly from highs in 2015 and 2016 but still exceeds the production from years prior. Degrees awarded from the program have remained steady for the past five years. With the addition of a career scholarship in rangeland management we expect to move from a stable SCH and number of degrees to a growth trend based on student interests.

Looking outside of CSC, data from the Range Science Education council (RSEC) and North American Range University Program Leads (NARUP) range programs across the country have been showing declining trends in enrollment. At CSC have bucked that trend to see growth within the program. Data from RSEC and NARUP show that the Range Management program at CSC continues to have higher enrollment and produce more 454 Series qualified (according to Office of Professional Management: https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/0400/rangeland-management-series-0454/) than all but two universities with a rangeland management program.

From fall 2016 to spring 2020 the program included four full time faculty. In 2020-21 we have been operating with three fulltime faculty. Which is significant as our FTE remains near or above 5.0. While a search is ongoing, there is significant need to fill this vacancy.

CSC Existing Program Review Report 2021 Social Work

1. <u>Section One: Overview of Program Offerings</u>

Major	Option	Minor	Degree	Credits
Social Work	Social Work		ВА	57

The CSC Social Work program has been accredited by the Council on Social Work Education (CSWE) since 1993. Students who graduate from Chadron State College in Social Work are prepared for social work practice in a multicultural context within the region, as well as nationally and globally. The challenges of and capacities for addressing human diversity are integrated throughout the social work curriculum. The social work curriculum is also designed to encourage the development of knowledge and skills in collaboration, collegiality, and networking. Graduates of the CSC Social Work program are prepared to provide professional leadership within the region.

2. <u>Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns</u>

Analysis of Program

Social Work Program Accreditation/Standing

A **diploma** indicating graduation from an accredited social work program is required by the State of Nebraska if one uses the title "social worker" or otherwise represents oneself as a social worker. Social work practice is the professional activity of helping individuals, groups, families, organizations, and communities improve, restore, or enhance their capacities for personal and social functioning while applying professional application of knowledge, principles, and methods taught in the CSC Social Work Program. Graduated students are proficient in helping people achieve political, social, and economic justice. CSC has a Social Work major with 48 credit hours specialized in social work and 15 credit hours required from other disciplines, including psychology, justice studies, economics, and human biology. In addition, students must complete essential studies requirements specific to the College.

This program was re-affirmed with the accrediting agency, the Council on Social Work Education (CSWE), eight years ago and will be due for re-accreditation in the fall of 2022. The program averages 10 graduates per year. There are no social work programs other than the CSC program in western Nebraska or western South Dakota. Other social work programs within Nebraska offering accredited social work programs are Nebraska Wesleyan University, Creighton University, Dana College, Union College, University of Nebraska--Kearney, and University of Nebraska--Omaha. The Social Work Program functions with regular meeting input from a local advisory committee that consists of community social workers.

Social Work Program Contributions (examples)

- Students and faculty worked with Justice Studies department to present a conference on child welfare on CSC campus
- Students and faculty worked with Business department and Family and Consumer Sciences program to bring World Food Day events to the campus

- Students and faculty worked with Family and Consumer Sciences program to sponsor a "Poverty Simulation" experience for CSC students.
- Students and faculty worked with Art department in providing presentations in art therapy for Elements of Arts courses.
- Students and faculty assisted in the soliciting and preparation for the Galaxy Speaker, Gary May (disabled veteran).
- Faculty actively engage in student recruitment by visiting high schools and offering recruitment events on campus.
- The senior social work students have presented the following day-long conferences on campus, free of charge to the campus and the public: Child Welfare, Cancer, Bullying, PTSD, Sexual Assault, Sex Trafficking, Hate, and LGBTQ.

Economic Contributions

- Demand for social workers is increasing in Nebraska according to the Nebraska Department of Health and Human Services. Social Work is recognized as one of the major and significant employment growth areas in Nebraska. The consequences of the Covid-19 pandemic, and the subsequent impact on the economy, will likely increase the need for social workers.
- The current United States Department of Labor Occupational Outlook Handbook, job outlook, 2019-2029, predicts job growth for social workers at 13% which is much higher than the average for all occupations which is 4%.
- Nationally, school systems alone will experience a 12% increase in the number of school social workers hired to help with the problems associated with life situation abuses found in communities and families (USD of Labor).
- Practicum site support (internships) for the program includes Black Hills Children's Home in Rapid City, SD; VA Black Hills Healthcare System at Fort Meade and Hot Springs, SD; Crest View Care Center, Chadron NE; Rosebud Sioux Tribe Education Department, Rosebud SD.; Family Rescue Services, Chadron, NE; Northwest Community Action in Chadron, NE; High Plains Development Corp in Chadron; Lusk, Wyoming Women's prison; Torrington, Wyoming Men's Prison; Torrington, Wyoming Children's Home; Department of Social Services, Rapid City, South Dakota; Bethany Adoption Services, Rapid City, South Dakota; the Pine Ridge Indian Reservation, and others.
- SW students are required to participate in 40 hours of community volunteer work as part of their education. Volunteer locations include Special Olympics, domestic violence hotline, Head Start, Community Action, Camp Norwesca, food pantry, school mentoring and after school programming, English as a Second Language instruction at Job Corp., as well as a number of long-term senior care facilities.

Service Region Contributions (examples)

- The Social Work Club has regularly raised money for at-risk families in the area, including a family on the Rosebud Indian Reservation whose home had been vandalized by a gang. Every year, students in the Social Work Club raise money to support a community project or to specifically help someone in need. The Social Work Program, in order to maintain its accreditation with the Council on Social Work Education, is required to have an active Social Work Club.
- Social work students, as a portion of their curriculum requirements, individually volunteer a minimum of 40 hours to community work. In addition, students support NASW-NE to promote legislation that NASW-NE deems important for the well-being of at-risk citizens of Nebraska.

• SW students annually attend a legislation training conference in Lincoln, Nebraska, which is designed by the legislature as a social work student only program. CSC students are joined by social work students from across eastern Nebraska for this two-day event.

Overall, the Social Work Program at Chadron State College is recognized by many social service agencies in the tri-state area of northwest Nebraska, northeast Wyoming, and southwest South Dakota as vital to the work done at their agencies. Graduates of the Social Work Program at CSC fill numerous skilled social work positions that otherwise would likely go unfilled or filled with individuals not professionally trained to do the work required of the agency.

Program Resources

CSC Resource Contribution

Chadron State College meets the needs of the Social Work Program. The Council on Social Work Education (CSWE) has explicit requirements that Chadron State College must meet in order to have an accredited social work program. Colleges and universities must pay annual fees to house a social work program. They must also have a full-time program director and a full-time field director. Each of these positions must have included in their work load three hours of release time. Thus, the College must agree that the program director and the field director each carry nine hours of classes with three release hours for a total 12 credit hour load per semester. The College must also assure that the program is financially progressive and that as many resources as are expected by CSWE are readily available, including up to date library resources which are fundamentally necessary for the education of social work students. The College is also responsible to encourage and financially support to the extent possible opportunities for the social work faculty to experience continuing education.

Regarding the Field Education Program, the College is expected to support the costs necessary for the field director to fulfill the duties of his position. The Field Program depends on the field director establishing a close working relationship with agency supervisors and social workers. To do this, the field director—while certainly relying on such technology as Zoom and Skype—must nevertheless travel to agencies that can be as far as 250 miles from the campus. A school vehicle is always available for these trips, and at no time has the field director been prohibited from travelling to an agency if he deemed it critical to the development of an internship.

There are times when office help might be beneficial to the program. However, while program-designated personnel help is not always available, the College does provide for work-study students to assist the program—though there are semesters when work-study students are not available. Specifically, designated office assistance is welcomed, especially when the program is preparing documentation materials for CSWE re-accreditation.

Community Resource Contribution

Chadron State College is fortunate to be involved in a community that recognizes the importance and value of the wealth of resources that a major academic institution provides. The social work program has benefitted greatly from the relationship the College has built with the community. In the last three years, over \$30,000 has been donated to the social work program. Approximately half of that amount has been set aside for the program to continue offering meaningful conferences free of charge to the

community. Since 2008, the seniors in the Social Work Professional Program have presented a fall conference, bringing to the community and the campus outstanding speakers and political figures.

Summary Resource Comments

The Social Work Program has adequate support from the College to allow it to meet its major resource needs. With the last CSWE accreditation visit, the CSWE site visitors found that the College met all the standards for social work education.

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/Awards in Program		SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		740	758	813	771.00	738.00	764
Faculty Full-time Equivalency (FTE)		2.34	2.21	2.21	2.21	2.09	2.21
SCH/Faculty FTE		316.24	342.99	367.87	348.87	353.11	345.82
Number of Degrees and Awards	ВА	7	10	10	12	9	9.6
Awarus							
(list degrees/awards separately)							

This program is the only Social Work Program serving the greater two-thirds of Western Nebraska, as evidenced by annual increasing student enrollment numbers. In addition, student majors develop, organize, coordinate and host and annual Social Work Conference every year that addresses a timely topic (i.e., Human Trafficking in Nebr., The Element of Racial/Ethnic Hate). This conference is attended by hundreds working within the service professions in Western Nebraska.

The Chadron State College Social Work Program is the only social work program in the Northeast Wyoming, South-Central South Dakota, and Northwest Nebraska area. The nearest four-year college is in Spearfish, SD, Black Hills State University, and they do not offer a BSW degree. Nor is a BSW degree available at CSC's two sister colleges, Wayne State and Peru State. There are two community colleges nearby, but social work courses cannot be taught at that level.

The CSC Social Work Program regularly places interns in social service agencies in the three-state area mentioned above, including the following: Lusk, Wyoming Women's Prison, Torrington, Wyoming Men's prison, Nebraska Department of Health and Human Services, Capstone (forensic interviewing of children), the Black Hills Children's Home of South Dakota, Drug and Alcohol, Adoption Services, School Systems, Veterans Homes, hospitals and hospice agencies in Rapid City, South Dakota, in Chadron, Nebraska, and in Scottsbluff, Nebraska. These agencies do not represent the full scope of internship placements for the Program, but they do provide examples of the scope of services in which social work interns can be placed. Furthermore, it is rare when a graduating class of BSW-level students are not all employed before graduation.

PSC Existing Academic Program Review Report 2021 Liberal Arts

1. Section One: Overview of Program Offerings

Major	Option, Concentration, Focus Area or Endorsement	Minor	Degree	Credits
	Core with 2 Concentration Areas:			
	• Art			
	 Music 			
Liberal Arts	History/Political Science	N/A	BA	57
	 English/Journalism 			
	 Science/Math 			
	 Sociology/Psychology/Anthropology 			

This program is not externally accredited

2. <u>Section Two (Option A)</u>: Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

Overview

The Liberal Arts major builds on the College's broad general education foundation and allows for student flexibility in concentration fields of interest. At Peru State College, the Liberal Arts degree is sought out primarily by students that have switched programs. Students start one program, gain a significant amount of credit then find passion in another discipline. Students who graduated with this option indicated that they would most likely have left college if this major was not available.

Students in the program must complete a core of 15 hours, along with the selection of two concentration areas, 21 hours each. Overall the coursework used for this degree program must be at least 50% upper-division level, and a capstone class is required in one of the two concentration areas. The concentration areas include music, art, English/journalism, history/political science, science/math, and sociology/psychology/anthropology. This design fits a student's needs who may have changed their major late in their college careers, while providing rigor in distinct liberal studies disciplines.

Assessment

The Liberal Arts program also requires one capstone course in one of the concentration areas. This program is assessed as part of individual concentration areas and has not indicated any program concerns. One finding was to advise students of the capstone requirement early in selecting this major so that students can complete discipline capstone courses. Professors advise students in one of the concentration fields to alleviate this concern.

Future Directions

One idea under consideration by the department is to expand the number of concentration areas to include more offered programs online. This expansion would increase the potential number of students who could adopt this area of study. The current additional course requirements for earning a BA is a limiting factor to students selecting this program.

Program Resources

Faculty and faculty-related resources:

Faculty support for this academic program come from existing programs. At the current level of student enrollment in this program, faculty resources are sufficient. It is a program that increases the efficiency of concentration areas without adding FTE to the college programs.

Informational resources (library, technology, data services, etc.):

Library, learning management system (Blackboard), and data service resources are adequate for current programming.

Physical facilities and instructional equipment, if applicable:

Classrooms for lectures have all been equipped with multiple modes and technologies for instruction. The colleges' method for the upkeep of those technologies is sufficient for program needs. Classroom resources are adequate.

Fiscal resources:

The Liberal Arts program does not require additional financial resources to operate within the college's existing program structure. Faculty development and student research are conducted through each concentration area.

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		NA	NA	NA	NA	NA	NA
Faculty Full-time Equivalency (FTE)		NA	NA	NA	NA	NA	NA
SCH/Faculty FTE		0	0	0	0	0	0
Number of Degrees and Awards	B.A.	5	0	1	2	2	2
(list degrees/ awards separately)							

Due to the interdisciplinary nature of this program, there are no SCH/FTE thresholds to meet, and the threshold of degrees for the 5-year mean is set at two (2), rather than seven (7). Therefore, the program meets the established CCPE requirements.

PSC Existing Academic Program Review Report 2021 Natural Science

1. Section One: Overview of Program Offerings

Major	Option, Concentration, Focus Area or Endorsement	Minor	Degree	Credits
Natural Science	Biochemistry		BA, BS	57-58
Natural Science	Biology		BA, BS	55-56
Natural Science	Disease and Human Health		BA, BS	56-57
Natural Science	Nuclear Technology (operators license needed)		BA, BS	67
Natural Science	Wildlife Ecology		BA, BS	57
Natural Science		Biology		21
Natural Science		Chemistry		20
Natural Science	Biology Subject Endorsement (6-12)		BA, BS	42
Natural Science	Chemistry Subject Endorsement (6-12)		BA, BS	42
Natural Science	Science Field Endorsement (6-12)		BA, BS	49

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

Overview

The Natural Science program also provides the majority of support for the preprofessional programs: Pre-Clinical Perfusion, Pre-Cytotechnology, Pre-Dental, Pre-Dental Hygiene, Pre-Medical, Pre-Medical Lab Science, Pre-Mortuary, Pre-Nursing, Pre-Optometry, Pre-Osteopathic Medicine, Pre-Pharmacy, Pre-Physical Therapy, Pre-Physician Assistant, Pre-Podiatric Medicine, Pre-Radiography, Pre-Respiratory Therapy, Pre-Veterinary Medicine.

Natural Science Program Mission and Goals

The mission of the Natural Science program distills and embodies the mission of Peru State College. The mission is to cultivate our students' scientific, analytical, and intellectual capacity by directly fostering and mentoring independent inquiry, knowledge, and discovery in the biological, chemical, and physical sciences. This mission is pursued through rigorous instruction, personal attention, and an aggressive undergraduate-based research program.

Our institutional role is to provide comprehensive and general studies course work in the physical and life sciences, including specialized courses of study leading to baccalaureate (BS/BA) degrees and teaching endorsements in biology, chemistry, and natural science. We provide the scientific and intellectual foundation for advanced training in science, veterinary medicine, and the human health professions.

Our ultimate goal is to establish a national reputation of academic excellence and leadership in undergraduate preparation for professional and graduate study, undergraduate research

opportunities, and faculty development. Departmental goals are divided into two groups that reflect our dual responsibilities for pedagogy and public stewardship.

Pedagogical Goals

- 1. Maintain and expand our unique experiential mentored approach to undergraduate science by integrating faculty professional development as a pivotal element of the teaching environment.
- 2. Instill in our students the six hallmarks of a general liberal education:
 - A. effective communication;
 - B. computer literacy;
 - C. independent critical thought;
 - D. intellectual capacity for change;
 - E. preparation to assume social and civic leadership roles; and,
 - F. the ability to pursue intellectually, ethically, aesthetically, and physically rewarding lives.
- 3. Produce Natural Science graduates who demonstrate the following:
 - A. baccalaureate-level mastery of scientific vocabulary and concepts appropriate to their major discipline of study;
 - B. the ability to utilize the scientific method in problem-solving;
 - C. the ability to critically evaluate scientific ideas and data and incorporate new information in a synthetic context; and,
 - D. an ability and proclivity for life-long learning.

Public Stewardship Goals

- 1. Acquire faculty and infrastructure sufficient to maintain a 4-year timeline for all degree-seeking majors.
- 2. Produce at least 15 graduates each academic year. Increase graduate production to maintain current efficiency as additional faculty and resources are allocated.
- 3. Maintain overall advancement rates above 50%.
- 4. Secure resources appropriate to provide significant opportunities for student research and faculty development.

Assessment of Student Learning

The Natural Science program goals are assessed in the program capstone. Based on these assessments, the program met and exceeded target measures in each of the four objective areas. Analysis of the measurements indicates that the percentage of students that didn't meet the target threshold has also decreased in each objective.

Program Resources

Faculty and faculty-related resources:

Increases in the number of students within the program have pushed faculty resources to their limit. This increase has mandated that the college provide upper-division coursework at a greater frequency. In turn, the growth has resulted in moving most non-major general education coursework to the online format where adjuncts can be used. Since some students desire oncampus classes, there is a great need for additional faculty in the Natural Sciences.

Informational resources (library, technology, data services, etc.):

Library, technology, and data service resources are adequate for current programming and research.

Physical facilities and instructional equipment, if applicable:

Classrooms for lectures have all been equipped with multiple modes and technologies for instruction. The colleges' method for upkeep of those technologies is sufficient for program needs. Laboratories are in the greatest need of instructional equipment. Physics and Chemistry are slowly building resources for the number of students within the program. The number of stations possible due to equipment sets would have exceeded lab capacity this year if the lab was not split this year due to COVID classroom limits. The program is establishing a ranked needs list of resources. Students in mentored research are limited in space.

Fiscal resources:

Fiscal resources continue to be a challenge for the program. Allocated fiscal resources have improved minimally and at the expense of other programs in the Arts and Sciences. The faculty in the Natural Sciences have used Student Engagement Enhancement funds as well as professional development funds to supplement the fiscal needs of the department.

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/Av	SCH/FTE	
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		4,191	3,734	4,271	3,964	3,867	4,005
Faculty Full-time Equivalency (FTE)		8	8	9	8	9.542	9
SCH/Faculty FTE		523.88	466.75	474.56	495.5	405.26	445
Number of Degrees and	B.S.	18	19	26	14	25	20.4
Awards (list degrees/ awards							
separately)							

Since our last review, we have added one full-time faculty member and established a Rural Health Opportunity Program partnership program with the University of Nebraska Medical Center. The five-year average for the number of graduates jumped from 11.0 students in our 2011 review to a mean of 20.4 degrees per year in 2020. The credit hour production per full-time equivalency remains high at 445 SCH/FTE. The added students in the Natural Science program demonstrate strong demand for this program by students in Nebraska and this institution. Facilities usage efficiency, especially in the laboratory spaces, has increased too.

When addressing the public stewardship goals, staffing is in critical need for the program. The increase in the number of Natural Science students has mandated an increase in the number of and frequency of upper-division program offerings. This growth has also limited the number of on-campus offerings of General Education courses without restricting students who require the course as part of their program's General Education requirement. The increase in FTE from the previous report of 6.4 to the current five-year mean of 9.0 also demonstrates a strong need for the program and its services. One FTE was a full-time campus faculty member, while the remaining increase results from an increase in the program's online general education offerings.

WSC Existing Program Review Report 2021 Communication Studies

1. Section One: Overview of Program Offerings

Major	Option, Concentration, Focus Area or Endorsement	Minor	Degree	Credits
Communication Studies	Communication Studies		BA/BS	36/48
Communication Studies	Organizational Leadership & Public Relations		BA/BS	36/48
Communication Studies	Theatre Arts		BA/BS	36/48
Communication Studies		Digital Film Production		21
Communication Studies		Promotion and Media		21
Communication Studies		Communication Studies		21
Communication Studies		Theatre		21
Communication Studies	Supplemental Endorsement-Speech			21
Communication Studies	Supplemental Endorsement-Theatre			24

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Analysis of Program

The Communication Studies program continues to be strong and meets the CCPE thresholds in both SCH/Faculty FTE and number of Degrees Awarded. The program focuses on quality undergraduate courses in interpersonal communication, small group communication, organizational communication, communication theory, public relations, organizational leadership, intercultural communication, health communication, communication ethics, and public speaking. It requires a capstone course as part of its core curriculum which assesses program curriculum, development and student success. The findings from the course indicate that students are highly satisfied (as high as 100%) with courses offered and delivered.

Students feel well prepared for their careers (90%) and are gainfully employed in their degree area. Students are attending graduate school in law, ministry, speech pathology, and communication studies, with 30% of graduating seniors continuing their education in graduate school. In addition, 60% of the undergraduate students are participating and presenting papers at communication conferences in the state, region and nation every year. Further, over 60% of the students participate in Lambda Pi Eta, the communication honor society. The program now offers a Public Relations Student Society of America club and Civic Leadership Club in which students connect with other University chapters, research public relations cases, local leadership, and develop internships. Recently, 2019, the program changed its name to Communication Studies to better reflect the variety of the courses we offer. This change will encourage more enrollment.

The program has steadily grown over the past five years. The 2020 major/minor report indicates 53 majors, 50 minors and 7 Theatre education students. It also supports four General Studies courses. This is a dramatic change from 5 years ago when it had only one general studies course. Two of the General Studies courses are in communication and two are in theatre.

The Communication Studies program is assessed annually. The program uses the senior portfolio as the direct measure, and exit interviews and senior seminar surveys for the indirect measures. Based on assessment findings, students are highly satisfied with their programs of study. They feel well prepared for their careers and are gainfully employed in their degree area. The program has 30% of its graduating seniors continue to graduate school.

Program Resources:

Faculty and faculty-related resources

We continue to grow in majors and minors. The faculty are teaching overloads each term. We need two faculty lines; one in theatre and one in communication studies to support our general studies and major courses.

Informational resources (library, technology, data services, etc.)

Resources are currently sufficient

Physical facilities and instructional equipment, if applicable

Resources are currently sufficient

Fiscal resources

Department appears to be funded adequately

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/Awards in Program		SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		4,273	3,737	3,922.5	4,410	4,956. 5	4,260
Faculty Full-time Equivalency (FTE)		12.13	10.90	10.34	11.63	12.31	11.46
SCH/Faculty FTE		352	343	379	379	403	372
Number of Degrees and Awards (list degrees/ awards separately)	ВА	0	1	1	4	6	2.4
	BS	14	11	10	13	3	10.2

WSC Existing Academic Program Review Report 2021 Computer Information Systems

1. <u>Section One: Overview of Program Offerings</u>

Program Description Table:

Major	Concentration	Minor	Undergraduate	Credit Hours
Computer Information Systems	Integrated Technology Support Concentration		BA, BS	57
Computer Information Systems	Networking Concentration		BA, BS	57
Computer Information Systems	Programmer/Analyst Concentration		BA, BS	57
Computer Information Systems	Web Analyst Concentration		BA, BS	57
Computer Information Systems		Computer Information Systems		21

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Analysis of Program:

The Computer Information Systems program exceeds the 5-year average SCH/Faculty FTE threshold of 300 by a considerable margin (449). The Computer Information Systems program exceeds the 5-year average number of degrees awarded threshold of 7 by a considerable margin (a combined BA and BS number of 18.2):

The numbers of students for the Computer Information Systems academic program are growing (numbers in parentheses indicate students with a second major in Computer Science in addition to their primary major):

	CIS Majors	TOTAL
Spring 2015	63 (5)	68
Spring 2016	71 (6)	77
Spring 2017	71 (7)	78
Spring 2018	71 (6)	77
Spring 2019	74 (6)	80
Spring 2020	82 (11)	93
Fall 2020	90 (10)	100

A combination of factors and forces have shown signs of the potential for propelling continued growth in enrollment in computing academic programs:

STEM (Science, Technology, Engineering, and Mathematics initiatives are generating interest in computing degree programs among prospective students

- A variety of other organizations and initiatives (for example: 4-H youth programs, robotics competitions, Hour of Code, Girls Who Can Code, etc.) are exposing young students earlier in their pre-college years to experiences that will continue to help drive the students' interest.
- Popular culture has continued to elevate access to technology and the requisite expertise to make use of the technology as desirable characteristics, thus driving interest in computing.
- Parents, guidance counselors, and others who have the potential to influence prospective students' choices of career fields have increasingly come to view careers related to computing as significant and potentially lucrative.
- The employment outlook for the range of Computer information Systems careers has been consistently positive and promising.
- The new Growing Together Cooperative Education program has increased interest and awareness in computing academic programs at WSC.
- The increasing base of WSC Computer Information Systems alumni has helped to spread the
 word about the academic program and continues to create opportunities for current students
 and graduates.

The Computer Information Systems academic program is essential to delivery of the Computer Science academic programs as well as to other academic programs at Wayne State College:

- Due to the highly integrated nature of the Computer Science program and the Computer Information Systems program, the delivery of Computer Information Systems courses is essential for the Computer Science program. The current computing core in the Computer Science program contains a mandatory 15 credit-hours of Computer Information Systems courses and the course work beyond the core also contains an additional 3 credit-hours of Computer Information Systems courses are options for upper-division, committee-approved electives in the Computer Science degree program. Without the Computer Information Systems courses in the Computer Science degree program, additional courses would have to be created specifically for the Computer Science program, thus potentially creating the need for additional resources.
- Students from a variety of majors, including Computer Science majors, elect to minor (or add a second major) in Computer Information Systems, which would not be possible if the Computer Information Systems program did not exist. There are also Computer Science courses in the Information Technology Supplemental Endorsement taken at the undergraduate and graduate levels by educators.

Program Resources

Faculty Resources:

The academic programs offered by the Computer Technology and Information Systems (CTIS) Department, including the Computer Information Systems academic program components, are delivered by five full-time faculty members, plus one adjunct faculty member who regularly teaches for the department. In addition to delivering the Computer Information System program components listed above, the department also delivers the Computer Science program, a Management Information Systems minor, and several service courses taken by students from other

majors and minors. At the current time, faculty resources for the Computer Information Systems program are adequate.

Faculty-related Resources:

Each full-time faculty member is provided their own faculty office. Each faculty member is provided with appropriate informational resources, technology resources, data resources, instructional resources, and fiscal support (as discussed below). Office support for CTIS faculty (reception, mail handling, ordering, office supplies inventory management, room reservation management, event support, etc.) are provided by the main School of Business and Technology office staff. Wayne State College provides numerous training opportunities for faculty during a typical academic year.

<u>Library/Information Resources:</u>

General Resources: The Conn Library building underwent a total building renovation that was completed in 2017. The redesigned building now provides a variety of different learning spaces. Features include:

- 1. Sixteen small group and individual study rooms that are available for students.
- 2. Three technology-infused, easily reconfigurable teaching classrooms.
- 3. Tutoring services supervised by the Holland Academic Success Center

The Library is open approximately 90 hours weekly, serves approximately 224,000 students, staff, faculty and community members annually. The library's information desk provides in person and telephone reference services and instruction 60 hours weekly. Librarians provide over 200 information literacy instruction classes or guest speaking sessions annually to Wayne State College students and area high schools. Interlibrary loan arrangements with state colleges and universities as well as with libraries throughout the nation have ensured that materials not housed in the collection can be made available within an average of two to three working days. The campus network provides off and on campus access to the library's catalog, Discovery system, and dozens of databases. More than 40,000 journal titles are available in full text from the library's journal database subscriptions. Over 350,000 monographic and 1,200 periodical titles are housed in the Conn Library Collection.

CTIS-Specific Information/Library Resources: In addition to the resources listed above, the CTIS program students and faculty routinely make use of a number of resources that are appropriate for supporting CTIS coursework and other program activities. CTIS students have access to 609 computer science journals in electronic form as well as hundreds of books and e-books.

Library personnel provide both general and discipline-specific instructional sessions to CTIS majors, freshman-level computer literacy courses, capstone senior seminar courses, and several other selected courses. The CTIS discipline-specific sessions acquaint CTIS students with the many computing and information system resources available in the various areas of the library. In addition, the library provides individualized advice and assistance to WSC students and faculty.

Each year multiple CTIS faculty participate in the materials selection group for Computing areas. They provide purchase and acquisition recommendations to the Wayne State College Library staff. In addition, several CTIS faculty also participate in a similar group for business resources; many of the reference disciplines for CTIS are represented in the business materials.

Technology Resources:

CTIS faculty are provided with a high-performance office computer equipped with dual monitors. The faculty offices also have the necessary equipment for faculty members to do basic teleconferencing (Zoom, etc.). A digital (Voice-over-IP) telephone with advanced capabilities is provided to each faculty office. Each faculty member also has at least one additional computing device (laptop, tablet, etc.) to support their instructional activities. High-speed Internet access is provided via the campus network and a wide range of general-purpose and specialized software is available to faculty. Printing, scanning, and e-mail capabilities area also provided. A sophisticated Learning Management System (LMS) is provided for delivery of online instruction as well as for support of traditional face-to-face courses and hybrid course delivery. The CTIS Department relies heavily upon the excellent support provided by WSC's Network and Technology Services (NATS) area due to the technologically-dependent nature of the courses that we teach.

Data Resources:

The faculty of the CTIS Department are provided access to a considerable amount of internal data via the various systems and applications accessible through the "My WSC" branded portal available over the college network. Monthly reports regarding departmental budget status are provided to the CTIS Department Chair. Various other reports are provided to the CTIS Department and its faculty throughout the year by a range of functional offices at WSC. The CTIS Department is also able to access a considerable number of external data sources via the Internet and technology capabilities provided to each faculty member. Examples of such internal reports and external data sources include:

- Major-Minor Reports (which show enrollment status of Concentrations and Endorsements)
- QAR reports (that show data and information regarding key institutional and program variables and metrics)
- Admissions Reports
- Course Enrollment History Reports
- Faculty Load Reports
- Student Migrations Between Academic Program Reports
- Print and Photocopying Services Usage Reports
- Academic Calendar Reports (and updates)
- Reports to Support Specific Academic Committee Activities (for example, Promotion and Tenure Applications)
- Reports to Support Specific Departmental Activities (for example, List of Departmental Library Holdings and Utilization Rates, for review of library materials to be continued or discontinued)
- Various Career Services Reports (Internships, Job Placement, Salary Levels of Placed Students, etc.)
- H3 Reports (High Demand, High Skill, High Wage Positions)
- Occupational Outlook Handbook (from United States Bureau of Labor Statistics)
- Reports of the Joint Curriculum Task Force for Computer Science (and other computing degree areas' respective tasks force)
- Nebraska State College System Resources and Policies
- Reports and Resources from the Nebraska Coordinating Commission for Postsecondary Education (CCPE)
- Transfer Evaluation System (TES) Reports and Access
- Various Reports from State of Nebraska Departments and Agencies

- Data sets and Reports from Various Us Government Departments and Agencies
- Reports and Resources from the Higher Learning Commission (HLC)

Physical Facilities:

The CTIS Department has its faculty offices in Gardner Hall. At the end of the 2018 calendar year, the new \$15.2 million Center for Applied Technology (CAT) building on the Wayne State College campus was completed. The opening of that new building added a new computer lab, a new networking lab, a new computer hardware lab, and a new robotics lab for the CTIS Department's use. Those facilities were in addition to the excellent facilities that the CTIS Department continues to use in Gardner Hall. The CAT building facilities extend beyond those labs added for the CTIS Department and support other programs.

Instructional Equipment:

The construction and equipping of the new Center for Applied Technology (CAT) building has enhanced the range and quantity of instructional equipment available to the CTIS Department in delivering academic programs. Each of the new laboratory rooms in that building has new instructional furnishings and state-of-the-art audio-visual equipment to support instruction. The CTIS Department, with the support of WSC's Network and Technology Services area, has continued to maintain and periodically upgrade its instructional equipment in Gardner Hall as well. Classrooms in both the CAT building and Gardner Hall have projection capabilities. The new labs in the CAT building have lecture-capture capabilities and sophisticated instructor-student interaction capabilities. WSC currently supports the Canvas Learning Management System (LMS) and it is available for the support of online courses, hybrid courses, and traditional face-to-face courses. Gardner Hall computer labs are equipped with 20 student computers and one instructor computer. The computer lab in the CAT building is equipped with 24 student computing stations and a computer for the instructor. The various other classrooms and labs in Gardner Hall and the CAT building have equipment appropriate for what is being taught in those rooms.

CTIS Department Budget:

The CTIS Department has a modest departmental budget that is used to support the recurring costs, necessary periodic, equipment upgrades, required service contracts, supplies expenditures, faculty travel, and other appropriate costs. When combined with the other fiscal resources (mentioned below), the budget has adequately and successfully supported the CTIS Department during the period addressed by this report's time frame.

Other Fiscal Resources:

The CTIS Department has benefitted from funding allocations from the School of Business and Technology to support important needs and initiatives. In addition, CTIS faculty have been relatively consistent in their ability to successfully pursue internal grant funding opportunities at WSC for strategically important initiatives. At various times in its history, the department has received funding for major initiatives from WSC. The close working relationship that the CTIS Department has with WSC's Network and Technology Services area has allowed for many opportunities for synergistic arrangements that have conserved fiscal resources while enhancing faculty and student access to technologies that enhanced their educational opportunities.

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

<u>lumber of Degrees/A</u>	wards in Program	SCH/FTE
Baccalaureate	7	300
Masters	5	300
Specialist	4	300

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		1,583	1,673	1,527	1,744	2,040	1,713
Faculty Full-time Equivalency (FTE)		3.91	3.71	3.61	3.78	4.06	3.81
SCH/Faculty FTE		405	451	423	462	502	449
Number of Degrees and Awards	ВА	0	1	0	0	0	0.2
	BS	20	15	19	18	18	18.0
(list degrees/awards separately)							

WSC Existing Program Review Report 2021 Life Sciences Program

1. Section One: Overview of Program Offerings

Program	Teaching Endorsement	Concentration	Minor	Degree	Credits
Life Sciences	Biology Education Subject Endorsement (7-12) - 36			BA/BS	42-43
Life Sciences	Science Education Field Endorsement (7-12) - 48				52
Life Sciences		Biology		BA/BS	55-56
Life Sciences		Biology - Food Science		BA/BS	55-56
Life Sciences		Health Sciences		BA/BS	55-56
Life Sciences		Medical Laboratory Science		BA/BS	55-56
Life Sciences		Mortuary Science		BA/BS	53-54
Life Sciences		Respiratory Therapy		BA/BS	53-54
Life Sciences			Biology		20
Life Sciences			Environmental Studies		20

This program is not externally accredited.

2. Section Two (Option A): Analysis of Program, Including Adequacy of Resources and Related Concerns

Program Analysis

Program assessment

We assess our Life Sciences program annually. We use two direct measures and one indirect measure for program assessment. The direct measures include graded BIO 469/470 Senior Presentation or Research Project capstone course grades as well as an assessment exam that is administered during students 1st and last semesters of their 4 year program. The indirect method is exit information including self-reported acceptance to graduate schools, medical schools and entry into the job market.

Curriculum overview and goals

The Life Sciences/Biology major offers courses to students preparing for further study in medicine, dentistry, nursing, physical or occupational therapy, medical laboratory science, mortuary science, respiratory therapy and other allied health fields. The Life Science/Biology major provides students with career choices in biotechnology, wildlife management, public health, agronomic industry, organismal biology, environmental biology or biology education.

Courses in Biology offer majors and non-majors the background required to think critically about the role of the living world in their lives.

Programmatic concerns based on assessment of program

The Life Sciences programs continue to serve 30-40 graduates a year and supports other programs and students on campus. The continued strong enrollment into this program is a result of students' desire to enter STEM fields and receive a rigorous education and training using modern equipment.

Program Summary

In the Life Sciences Department, we foster a climate of intellectual curiosity. Student develop crucial laboratory skills that are applicable to a variety of science and health fields. Our science labs are among the best in the state and are used regularly by a range of classes to complete a rigorous science curriculum under the supervision of our distinguished faculty. The Carhart Science Building features biological, physical, and chemical science laboratories with cutting-edge equipment, while our human cadaver lab provides students the opportunity to learn about human anatomy and physiology beyond the books. Our new Anatomage Tables are 3D, life-sized, interactive anatomy tools that allow you to virtually dissect cadavers, to prepare for health care professions. Anatomy students will also have access to a lab that features human cadavers.

An additional uncommon feature of our program is that our Life Science majors must complete either an internship or a wet-lab based research project prior to their graduation. With the help of our career services offices, students set up internships that provide at least 50 hours of hands-on experience in their chosen field. Other students opt for a research experience that is guided by either or own faculty or in recognized undergraduate research experiences at tier 1 research institutions. In all cases, students must defend their research or a scientific concepts that was recognized during their internship experience.

Many of our students go on to medical and dental school, as well as various other health programs such as physician assistant and physical therapy. Other students go on to jobs in industry or natural resource conservation. Some students go on to graduate school and become researchers and faculty members at major universities. Our faculty frequently hear back from graduates who praise the preparation they received at Wayne State College.

Program Resources

Faculty and faculty-related resources

Seven of our eight current faculty are tenured or tenure-track while the eighth member is at "Instructor" level having more than 20 years teaching experience at Wayne State College. The faculty are:

- Professor Doug Christensen (Ph.D., University of Nebraska-Lincoln)
- Professor Mark Hammer (Ph.D., Iowa State University)
- Professor Robert McCue (Ph.D., Tulane University)
- Professor Shawn Pearcy (Ph.D., Washington State University)
- Associate Professor Danielle Peekenschneider (Ph.D., University of South Florida)
- Assistant Professor Jillian Wormington (Ph.D., Oklahoma State University)
- Assistant Professor Michael Mutehart (Ph.D., Northwestern University)
- Instructor Buffany DeBoer (M.S., Wayne State College)

All full-time faculty members in the department have their own offices adjacent to the teaching and research labs on 2^{nd} floor of the Carhart Science.

Informational resources

Wayne State College has excellent information resources available to all students including those in Life Science. The primary information resource employed by the Life Science program, however, is the information technology support provided by Wayne State College Network and Technology Services (NATS). NATS is invaluable in the planning, acquisition, and trouble-ticket service of hardware and software systems. Additionally, our library houses a number of science based journals in hard-copy, has access to virtually any science journal through inter-library loans and many prominent research publications are available free to the public over the internet.

Physical facilities and instructional equipment

The current physical facilities and instructional equipment are outstanding for a rural undergraduate institution.

Our Department is housed in a fairly recently renovated Carhart Science building which houses a broad range of cutting edge research and teaching equipment. This technology has been acquired through a combination of internal funding, gifts and various grants including a National Institute of Health grant.

Our equipment and technology package includes but is not limited to:

- Thermal Cyclers (qRT-PCR and standard)
- Gel imager
- DNA sequencing system
 High-Pressure Liquid Chromatography (HPLC)
- Standard and IR spectrophotometers
- Vertical and Horizontal Gel Electrophoresis
- Shaking and Standard Incubators
- Steam Cabinets
- 96 well plate readers (standard and florescent detection)
- Bead baths
- Stomacher
- Type II biosafety cabinets
- Fume hoods
- Calorimeters
- Nuclear Magnetic Resonance (NMR).
- Analytical balances
- Flow Cytometer (will arrive soon).
- Tissue culture facility
- Ultra low freezers
- Floor model and table top centrifuges
- Liquid nitrogen storage
- Semi-dry blotters
- Epi-florescent microscope
- Scanning electron microscope

3. Evidence of Demand and Efficiency (per established CCPE standards for 5-year means)

Number of Degrees/A	wards in Program	SCH/FTE		
Baccalaureate	7	300		
Masters	5	300		
Specialist	4	300		

		15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)		6,454	6,339	6,008	5,645	6,098	6,109
Faculty Full-time Equivalency (FTE)		15.90	15.77	14.87	14.17	15.01	15.14
SCH/Faculty FTE		406	402	404	398	406	403
Number of Degrees and Awards (list degrees/awards separately)	ВА	0	0	0	0	0	0.0
	BS	22	40	35	29	41	33.4