

2018-2019 ACADEMIC AFFAIRS SUBCOMMITTEE MEETING

Academic Affairs Subcommittee 1/9/2019
Academic Affairs Full Committee 1/17/2019

NUMBER, REQUEST, LEVEL, SPECIFIC REQUEST, DEGREE/COURSE, PROGRAM/COURSE,
TITLE, DEPT, COL, REASON

Proposal to Revise General Studies:

GSC distributed the proposal (per the GSC Governance Document) to the College Ed Policy / Academic Affairs Committees and FS Academic Affairs Committee for review and recommendations. The College Ed Policy / Academic Affairs Committees and the FS Academic Affairs Committee play an integral role in reviewing and commenting on the proposal to revise the General Studies Program. These committees are responsible for soliciting and collecting input on the proposal from their constituents and then relaying their recommendation to the GSC by the 60 working day deadline (5 p.m. April 1, 2019).

The proposal (appended) reduces the total program hours to 37; retains the current structure (Foundational core (9-12 hours), Portal (3 hours), Distribution (19-22 hours), and Capstone (3 hours)); eliminates the Democracy as a standalone category but integrates Democracy concepts / content into courses in other categories; and eliminates the requirement to take two separate disciplines within Humanities, Social Sciences, and Natural Sciences distribution categories.

#27, Create, Course, AGBS 188, GS Portal, AGBS, CBT, This is an agribusiness course. The prefix is being changed as the agribusiness program has its own prefix now.

#28, Alter, Program, Biology Comprehensive, B.S., BIOL, CNSS, We are inactivating BIOL 452 and combining it with BIOL 450 as a single lecture and laboratory class.

#29, Alter, Course, Prerequisite, BIOL 225, Anatomy and Physiology, BIOL, CNSS, This is course is specific to students pursuing careers in health science, and all of those programs require some type of chemistry. The chemistry courses listed as prerequisites are all part of the GS program, so first-year students who change their career goals after completing the chemistry course will still earn GS credit, which they would not if they took BIOL 225 as a first-year student. Background chemistry knowledge, however, is not as critical to success in the course as is experience and maturity. Therefore, sophomore standing is acceptable as a prerequisite for this course; Change in prerequisite; Old Value: CHEM 145 or CHEM 150 or CHEM 160 and CHEM 160L or permission of instructor; New Value: Sophomore standing or permission of instructor. Successful completion of a college-level biology or chemistry course is highly recommended.

#30, Alter, Course, Title, Course Description, BIOL 309, Cellular & Molecular Biology, BIOL, CNSS, We are changing the name of the course to reflect the need of this course as a prerequisite for the other Molecular Biology courses, as well as to be in line with other courses transferring in to UNK; Change in course title; Old Value: Cellular Biology; New Value: Cellular & Molecular Biology; Change in course description; Old Value: Various types of cells, their structure, function, and what they contribute to the functioning of the whole organism. Three hours of laboratory each week; New Value: This course deals with various types of cells- their structure, function, and what they contribute to the functioning of the whole organism. The course will have three lectures (50 min each) and one laboratory (3hr) every week.

#31, Alter, Course, Title, Prerequisite, Course Type, Credit Hours, Course Description, BIOL 450, Advanced Molecular Biology, BIOL, CNSS, We are combining our lecture only and lab only courses into one lecture, lab class. The credit hours will be increased to 4 to account for the laboratory. In addition, this course requires BIOL 309 as a direct prerequisite and therefore the name change to Advanced

Molecular Biology, since BIOL 309 is becoming Cellular & Molecular Biology; Change in title; Old Value: Molecular Biology; New Value: Advanced Molecular Biology; Change prerequisite; Old Value: BIOL 309 and BIOL 360 or permission of instructor; New Value: BIOL 309 or permission of instructor; Change in course type; Old Value: Lecture; New Value: Lecture, Laboratory; Change in credit hours; Old Value: 3; New Value: 4; Change in course description; Old Value: The course is an in-depth discussion of the principles of modern molecular biology. Major topics to be covered are: (1) Organization and evolution of eukaryotic genomes and genes, (2) prokaryotic and eukaryotic transcription and its regulation, (3) RNA splicing and processing, (4) epigenetic mechanisms, and (5) RNA catalysis and interference. 3 hours of lecture per week; New Value: The course is an in-depth discussion of the principles and techniques of modern molecular biology. Specifically, this course covers the central dogma processes (replication, transcription, and translation) as they occur in both prokaryotic and eukaryotic organisms. Students will be exposed to a number of techniques including isolating DNA, RNA, and proteins, polymerase chain reaction, gel electrophoresis, genetic cloning, flow cytometry, ELISA, and immunoblotting. This course will emphasize design and interpretation of scientific experiments specific to molecular biology in coursework completed in lecture and lab.

#32, Inactivate, Course, BIOL 452, Techniques in Molecular Biology, BIOL, CNSS, We are putting this course as inactivated or dormant because we are combining it with 450 as one course only.

#33, Alter, Program, Biology, B.S., BIOL, CNSS, We are inactivating BIOL 452 and combining it with BIOL 450 as a single lecture and laboratory class.

#34, Alter, Minor, Biology Minor, BIOL, CNSS, We are inactivating BIOL 452 and combining it with BIOL 450 as a single lecture and laboratory class.

#35, Alter, Course, Prefix, Course Number, CYBR 100, Computer Science Principles, CYSY, CBT, Move to the Cyber Systems Department, with a new numbering system; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course number; Old Value 106; New Value: 100.

#36, Alter, Course, Prefix, Course Number, Title, Prerequisite, Type, Credit Hours, Course Description, CYBR 101, Computer Science I: Python for Analytics, CYSY, CBT, Change to the new Cyber Systems Department. Change the language from Visual Basic to Python. Python is a modern multiple purpose language that replaces the usage of Visual Basic. We are adding a lab to help the students learn the concepts better. We are also adjusting all introductory programming courses to have a similar structure; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course number; Old Value: 111; New Value: 101; Change in course title; Old Value: Applied Computer Programming; New Value: Computer Science I: Python for Analytics; Change in prerequisite; Old Value: None; New Value: Completion of or concurrent enrollment in MATH 102 or ACT Math score of 22 or above or Math placement into MATH 103 or above; Change in course type; Old Value: Lecture; New Value: Lecture, Laboratory; Change in credit hours; Old Value: 3; New Value: 4; Change in course description; Old Value: The main emphasis in this course is on identifying, analyzing, and implementing solutions for business and scientific problems through the use of event-driven programming techniques and concepts. The problem-solving tools that will be covered include (but are not limited to) table handling, graphic user interfaces, subprograms, file creation and manipulation, sorting and searching; New Value: A gentle first course in problem solving and software development; including logic, data storage and manipulation, data types, assignment statements, basic input/output, selection control, repetition control, subprograms, data file input/output, simple GUIs, one dimensional arrays and rudimentary software engineering techniques. Students complete programming projects using Python. Good programming techniques, program clarity, style, and effective documentation are emphasized through practice in designing, coding, and debugging programs. Intended for students with little or no programming experience. It aims to provide students with an understanding of the role computation can play in analyzing data in business, science, mathematical, and other problems. It is designed to help students, regardless of their major, feel justifiably confident of their ability to write small programs that allow them to accomplish useful goals. The class will use the Python programming language. Three hours lecture, two hours laboratory each week.

#37, Alter, Course, Prefix, Title, Course Number, Prerequisite, Type, Course Description, CYBR 102, Computer Science I: C for Security, CYSY, CBT, We are adding a lab to help the students learn the concepts better. We are also adjusting all introductory programming courses to have a similar structure. Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Programming in C; New Value: Computer Science I: C for Security; Change in course number; Old Value: 112; New Value: 102; Change in prerequisite; Old Value: None; New Value: Completion of or concurrent enrollment in MATH 102 or ACT Math score of 22 or above or Math placement into MATH 103 or above; Change in course type; Old Value: Lecture; New Value: Lecture, Laboratory; Change in course description; Old Value: Study of programming and problem-solving concepts and the implementation of these concepts using the C programming language. Demonstrates the power of C as a high and low level language; New Value: A rigorous first course in problem solving and software development that demonstrates the power of C as a high and low level language. Includes logic, data storage and manipulation, data types, assignment statements, basic input/output, selection control, repetition control, subprograms, parameter passage, scope of identifiers, data file input/output, one dimensional arrays and rudimentary software engineering techniques. Students complete programming projects using C programming. Secure programming techniques, program clarity, style, and effective documentation are emphasized through practice in designing, coding, and debugging programs. Intended for students interested in improving their security or engineering related problem-solving abilities through the use of software development, but no programming experience is necessary. Laboratory assignments develop mastery of the C programming language and a basic understanding of modern secure software development practices. Two hours lecture, two hours laboratory each week.

#38, Alter, Course, Prefix, Title, Number, Course Description, CYBR 103, Computer Science I: Java for Software Development, CYSY, CBT, Change to new Cyber Systems Department. Adjust all introductory programming courses to have a similar structure; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Introduction to Computer Science; New Value: Computer Science I: Java for Software Development; Change in course number; Old Value: 130; New Value: 103; Change in course description; Old Value: A first course in problem solving and software development; including logic, data storage and manipulation, data types, assignment statements, standard input/output, selection control, repetition control, subprograms, parameter passage, scope of identifiers, data file input/output, simple GUIs, software classes, objects, one dimensional arrays and rudimentary software engineering techniques. Students complete programming projects using a modern programming language. Good programming techniques, object-oriented design, program clarity, style, and effective documentation are emphasized through practice in designing, coding, and debugging programs. Intended for students interested in improving their problem-solving abilities through the use of software development. Laboratory assignments develop mastery of a high-level programming language and good programming and experience in modern software development practices. Three hours lecture, two hours laboratory each week; New Value: An in-depth first course in problem solving and software development; including logic, data storage and manipulation, data types, assignment statements, standard input/output, selection control, repetition control, subprograms, parameter passage, scope of identifiers, data file input/output, simple GUIs, software classes, objects, one dimensional arrays and rudimentary software engineering techniques. Students complete programming projects using Java. Good programming techniques, object-oriented design, program clarity, style, and effective documentation are emphasized through practice in designing, coding, and debugging programs. Intended for students interested in improving their problem-solving abilities through high quality software development, but no programming experience is necessary. Laboratory assignments develop mastery of a high-level programming language, and programming experience in Java, and a basic understanding of modern software development practices. Three hours lecture, two hours laboratory each week.

#39, Alter, Course, Prefix, Course Description, CYBR 108, Computers in Society, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value CYBR; Change in course description; Old Value: An elementary description of the components and principles of digital computers. Background and implications of information processing, computer influence on society, and uses of computers. Hands-on computer applications to reinforce concepts of problem solving and critical thinking and to illustrate modern applications of computers; New Value: This course will consist of an elementary description of the components and principles of digital computers, background and

implications of information processing, computer influences on society, and uses of computers. There will be hands-on computer applications that need to be downloaded and installed. Projects are assigned in order to reinforce concepts of problem solving and critical thinking and to illustrate modern applications of computers.

#40, Alter, Course, Prefix, Number, Title, Course Description, CYBR 140, The Internet Explained, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course number; Old Value: 150; New Value: 140; Change in course title; Old Value: Internetworking Literacy; New Value: The Internet Explained; Change in course description; Old Value: This course is a comprehensive overview of contemporary internetworking systems. Topics include voice, networking, wireless, and how these technologies are integrated into the daily lives of individuals. The course assumes no previous knowledge of the field, and can be used by all students seeking a background in fundamental networking and telecommunications concepts; New Value: This course is a great introduction to how the Internet works. Topics include history of telephony to the Internet, networking, wireless, cybersecurity and how these technologies are integrated into the daily lives of individuals. The course assumes no previous knowledge of the field, and can be used by all students seeking a background in fundamental networking and systems concepts. This course provides basic information needed for the student going on to pursue a career in the information technology fields. It also provides a technological foundation for students pursuing any career. With the prevalence of technology, understanding and becoming proficient with the basic terminology and concepts is a must for any student.

#41, Alter, Course, Prefix, Title, Multiple Times Taken, Prerequisites, Course Description, CYBR 150, Computer Science II: Object Oriented Programming, CYSY, CBT, New department merger; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Object Oriented Programming; New Value: Computer Science II: Object Oriented Programming; Change in course taken for multiple credits; Old Value: Yes; New Value: No; Change in prerequisites; Old Value: CSIT 130 or CSIT 112; New Value CYBR 101 or CYBR 102 or CYBR 103; Change in course description; Old Value: Structured programming concepts and principles including an introduction to data structures. Comprehensive study of a structured programming language with a variety of programming applications. An appropriate state-of-the-art language will be used; New Value: Object-Oriented (OO) programming concepts and principles, including an introduction to some basic data structures. Comprehensive study of an OO programming language with a variety of programming applications. An appropriate state-of-the-art language will be used.

#42, Alter, Course, Prefix, Prerequisites, Corequisites, Course Description, CYBR 180, Discrete Structures, CYSY, CBT, Changing to the CYBR program designation; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisites; Old Value: CSIT 130 and completion of or concurrent enrollment in MATH 115; New Value: CYBR 101, CYBR 102 or CYB103; Change in corequisite; Old Value: None; New Value: Completion of or concurrent enrollment in MATH 115 or MATH 123; Change in course description; Old Value: The study of mathematical topics and data structures necessary for a successful program of study in Computer Science. Topics include set theory, Boolean algebra, propositional calculus, logic circuits and finite state machines. (May be taken concurrently with MATH 115.); New Value: The study of mathematical topics and data structures necessary for a successful program of study in Computer Science. Topics include set theory, Boolean algebra, propositional calculus, logic circuits and finite state machines.

#43, Alter, Course, Prefix, Course Description, CYBR 182, Software Productivity Tools, CYSY, CBT, Changing to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course description; Old Value: This lab course addresses competency and applications of computer skills. Software covered includes: operating systems and environments, word processing, spreadsheets, databases, Web pages; New Value: This lab course addresses competency and applications of computer skills. Software covered includes: operating systems and environments, word processing, spreadsheet, databases and cloud-based solutions.

#44, Alter, Course, Prefix, Multiple Times Taken, CYBR 188, GS Portal, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in multiple times taken for credit; Old Value: Yes; New Value: No.

#45, Alter, Course, Prefix, Title, Prerequisite, Course Description, CYBR 190, Data Analytics Mathematical Modeling, CYSY, CBT, Change to new Cyber Systems Department. Adjust title to align with course content; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course title; Old Value: IT Enabled Math for Decision Making; New Value: Data Analytics Mathematical Modeling; Change in prerequisite; Old Value: MATH 102 and either MIS 182 or passing score on Computer Proficiency Test; New Value: MATH 102 and either CYBR 182 or passing score on Computer Proficiency Test; Change in course description; Old Value: This course is designed to cover fundamental IT enabled mathematical operations and their application to business problems. Some areas to be covered include: systems of equations and inequalities; sequences, inductions, and the binomial theorem; counting and probability; basic statistics; simulation; data tables and what-if analysis; and enhancing decision-making using Solver; New Value: This course is designed to cover fundamental IT enabled models and their application in data analytics. Some areas to be covered include: systems of equations and inequalities; sequences, inductions, and the binomial theorem; counting and probability; basic statistics; simulation; data tables and what-if analysis; and enhancing decision-making using Solver.

#46, Alter, Course, Prefix, Title, CYBR 199, Current Issues in Cyber Systems, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Current Issues in CS/IT; New Value: Current Issues in Cyber Systems.

#47, Alter, Course, Prefix, Prerequisite, CYBR 223, Information Technology Infrastructure, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 150; New Value: CYBR 150.

#48, Alter, Course, Prefix, Title, Number, Grading Type, Course Description, CYBR 251, Linux Programming Environment, CYSY, CBT, Change to the Cyber Systems Department. Move to its own course number; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Computing Environments: LINUX; New Value: Linux Programming Environment; Change in course number; Old Value: 100C; New Value: 251; Change in grading type: Old Value Credit/No Credit; New Value: Traditional Grades; Change in course description; Old Value: None; New Value: A survey of the fundamental concepts of the Linux operating system, including hands on experience with various components including the command line and graphical user interface.

#49, Create, Course, CYBR 252, Cloud Computing and Containerization, CYSY, CBT, Change from a 199 Special Topics course into a course with its own number. Change to the Cyber Systems Department.

#50, Alter, Course, Prefix, CYBR 280H, Special Topics, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR.

#51, Alter, Course, Prefix, Prerequisites, Course Description, CYBR 301, Computer Organization, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisites; Old Value: CSIT 150 and CSIT 180; New Value: CYBR 150 and CYBR 180; Change in course description; Old Value: A study of computer organization and Assembly language. Topics include basic logic design, addressing modes and instruction sets, data path, memory hierarchy, buses and peripherals, parallel processing, error detection and recovery, encryption and compaction; New Value: A study of computer organization and Assembly language. Topics include basic assembly instructions, logic design, addressing modes and instruction sets, data path, memory hierarchy. Students will gain hands on experience in programming in x86 and ARM assembly.

#52, Alter, Course, Prefix, Prerequisite, CYBR 302, Principles of Management Information Systems, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in prerequisite; Old Value: Enrollment in MIS 302 is not allowed if CSIT 350 has been completed; New Value: None.

#53, Alter, Course, Prefix, CYBR 305, Healthcare Informatics & Technology, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: ITEC; New Value: CYBR.

#54, Alter, Course, Prefix, Number, Title, Prerequisite, Course Description, CYBR 306, Introduction to Predictive Modeling, CYSY, CBT, Change to Cyber Systems Department. Change number to reflect appropriate level of instruction. Course description changes are being made to more accurately reflect the course content; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course number; Old Value: 282; New Value: 306; Change in course title; Old Value: Business Intelligence using Databases; New Value: Introduction to Predictive Modeling; Change in prerequisite; Old Value: Passing score on Business Computer Proficiency Exam or MIS 182; New Value: Passing score on Business Computer Proficiency Exam or CYBR 182; Change in course description; Old Value: Data Analytics uses real-time processing of sentiment, buzz, social networks, context and/or other data of interest to improve performance and impact. This course gives an overview of how business intelligence leverages data analytics to enable more informed decisions and to influence others. Students learn how to develop, explore, and answer their own questions using analytical processes to examine big datasets; New Value: Data Analytics uses real-time processing of sentiment, buzz, social networks, context and/or other data of interest to improve performance and impact. This course introduces predictive modeling to enable more informed decisions and to influence others. Students learn how to develop, explore, model, and answer questions using analytical processes to examine big datasets.

#55, Alter, Course, Prefix, Prerequisites, CYBR 330, Algorithms and Data Structures, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course prerequisites; Old Value: ENG 102 and MATH 115 and CSIT 180 and CSIT 150; New Value: ENG 102 AND MATH 115 AND CYBR 180 AND CYBR 150.

#56, Alter, Course, Prefix, Title, Prerequisites, Course Description, CYBR 335, Fundamentals of Networking & Systems, CYSY, CBT, Change to the Cyber Systems Department. Update content to match new technologies; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course title; Old Value: Network Architecture and Telecommunications I; New Value: Fundamentals of Networking & Systems; Change in prerequisites; Old Value: Passing score on the CompTIA A+ certification exam or CompTIA Network+ certification exam or ITEC 150; New Value: CYBR 140 or CYBR 101 or CYBR 102 or CYBR 103 or passing score on CompTIA A+ certification exam; Change in course description; Old Value: This course presents a technical overview of information networking and telecommunications. The course will cover the principles necessary for understanding the layered network architecture of information network and telecommunications systems. Hands-on labs will be conducted using a variety of network equipment; New Value: This course is the first technical networking & systems course. Topics covered include layered network architectures, packet sniffing with protocol analysis, virtual local area networks, basic network security and network design through v4 and v6 subnetting.

#57, Alter, Course, Prefix, Number, Prerequisite, CYBR 340, Information Networking Preceptorial, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course number; Old Value: 330; New Value: 340; Change in course prerequisite; Old Value: ITEC 335; New Value: CYBR 335.

#58, Alter Course, Prefix, Title, Credit Hours, Prerequisite, Course Description, CYBR 345, Intricacies of Advanced Networks & Systems, CYSY, CBT; Change to the new Cyber Systems Department; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course title; Old Value: Network Architecture and Telecommunications II; New Value: Intricacies of Advanced Networks & Systems; Change in course credit hours; Old Value: 4; New Value 3; Change in prerequisite; Old Value: ITEC 335; New Value: CYBR 335; Change in course description; Old Value: This course presents a more in-depth approach to network architecture by examining routing and switching technology. Topics studied include fundamental local area network design, installation, and troubleshooting as well as how routers interconnect through routing protocols and routing tables. Hands-on labs will be conducted using a variety of network equipment; New Value: This second technical networking & systems course looks in-depth at routing and switching protocols. Students will utilize the hands-on lab environment to examine the routing

and switching protocols as well as a variety of other topics like enterprise wireless, network monitoring and high availability. Students with a strong command of the concepts presented will be prepared to sit for specific industry certification exams. Two hours lecture, two hours lab per week.

#59, Alter, Course, Prefix, Title, Prerequisite, Course Description, CYBR 350, Predictive Modeling II, CYSY, CBT, Change to Cyber Systems Department. Update course title to reflect course content; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course title; Old Value: Intermediate Business Intelligence through Data Mining; New Value: Predictive Modeling II; Change in prerequisite; Old Value: MIS 302 or CSIT 350 and junior standing; New Value: CYBR 302 and junior standing; Change in course description; Old Value: Study of how business intelligence is extracted through data mining and used to support business functional activities. This course is designed to familiarize students with the critical role of data warehousing and data mining to organizational decision making process; New Value: Study of predictive modeling using data analytics tools such as data mining to support various organizational activities. This course is designed to familiarize students with the critical role of data warehousing and data mining as predictive modeling tools to enhance the organizational decision making process.

#60, Alter, Course, Prefix, Prerequisites, Course Description, CYBR 381, Systems Analysis and Design I, CYSY, CBT, Move to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in prerequisites; Old Value: MIS 380 Enrollment not allowed in MIS 381 if CSIT 380 has been completed; New Value: CYBR 335 or CYBR 101 or CYBR 102 or CYBR 103; Change in course description; Old Value: System development using the life cycle, rapid application development, prototyping, and software testing. This course is coupled with MIS 481; New Value: Explore the systems life cycle. Learn tools and strategies for system and information analysis. Includes need identification, feasibility studies, requirements assessment, project management and group dynamics.

#61, Alter, Course, Prefix, CYBR 388, GS Capstone, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR.

#62, Alter, Course, Prefix, Title, Number, Credit Hours, Prerequisites, Course Description, CYBR 399, Independent Study in Cyber Systems, CYSY, CBT, Change to the Cyber Systems Department. Change the number to be consistent with other programs in CBT; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Independent Study in Computer Science/Information Technology; New Value: Independent Study in Cyber Systems; Change in course number; Old Value: 495; New Value: 399; Change in credit hours; Old Value: 1-3; New Value: 1-6; Change in prerequisites; Old Value: CSIT 150 and permission of department chair; New Value: Junior or senior standing; permission of department based on a submitted and approved proposal; Change in course description; Old Value: This course provides the opportunity for students to conduct independent study on any computer science/information technology topic not covered by other regularly offered courses. The topic will be selected in consultation with and the study will be supervised by a computer science/information technology faculty member. The student must complete a project in an area of interest to the student and should include programming. Upon completion of the project a format presentation will be given by the student to all interested parties. A written contract specifying the topic and requirements is required before registering for the course. (A total of three credit hours in any combination of CSIT 399 and CSIT 492-CSIT 495 may be applied toward a computer science/information technology major or minor.); New Value: This course provides the opportunity for students to conduct independent study on any cyber systems topic not covered by other regularly offered courses. The topic will be selected in consultation with and the study will be supervised by a cyber systems faculty member. The student must complete a project in an area of interest to the student. Upon completion of the project a format presentation will be given by the student to all interested parties. A written contract specifying the topic and requirements must be submitted and approved by the department before registering for the course.

#63, Alter, Course, Prefix, Prerequisite, Course Description, CYBR 401, Operating Systems, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 330; New Value: CYBR 330; Change in course description; Old Value: Introduction to modern operating system concepts and design. Topics will include: Processes,

semaphores, monitors, concurrent process management, virtual memory, file systems, scheduling algorithms, deadlocks and protection, I/O control interrupt handling, client-server model, remote procedure call, distributed synchronization, threads and transactions; New Value: Introduction to modern operating system concepts and design. Topics will include: Processes, semaphores, monitors, concurrent process management, virtual memory, file systems, scheduling algorithms, deadlocks and protection, I/O control interrupt handling, client-server model, remote procedure call and threads.

#64, Alter, Course, Prefix, Prerequisite, Course Description, CYBR 404, Software Engineering, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 330; New Value: CYBR 330; Change in course description; Old Value: This course will include the fundamental principles of software engineering. Software specification techniques: rigorous methods and formal methods. Software design: object-oriented design, function-oriented design, real-time systems design, user interface design. Programming techniques and tools. Software reuse and software metrics. Design patterns and component-based software development. Computer-aided software engineering. Software validation and verification. The object-oriented language Java will be used as the major programming language for this course; New Value: This course will include the fundamental principles of software engineering. Software specification techniques: rigorous methods and formal methods. Software design: object-oriented design, function-oriented design, real-time systems design, user interface design. Programming techniques and tools. Software reuse and software metrics. Design patterns and component based software development. Computer-aided software engineering. Software validation and verification. The object oriented language Java will be used as the major programming language for this course.

#65, Alter, Course, Prefix, Number, Prerequisites, CYBR 405, Interactive Web Application, CYSY, CBT, Change for the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course number; Old Value: 440; New Value: 405; Change in prerequisite; Old Value: CSIT 130 or CSIT 434; New Value: CYBR 101, CYBR 102, CYBR 103 or CYBR 434.

#66, Alter, Course, Prefix, Prerequisite, CYBR 406, Enterprise Web Application Development, CYSY, CBT, Update to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 150; New Value: CYBR 150.

#67, Alter, Course, Prefix, Number, Prerequisite, Course Description, CYBR 407, Introduction to Automata, Formal Languages, and Computability, CYSY, CBT, Change to the new Cyber Systems Department. Adjust number to make room for merged courses from other programs; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course number; Old Value: 402; New Value 407; Change in prerequisite; Old Value: Junior standing and CSIT 180 or MATH 115; New Value: Junior standing and CYBR 180 or MATH 115; Change in course description; Old Value: A survey of the fundamental concepts and conclusions in the theory of computation. Topics cover regular languages and finite automata, Kleen's theorem, context-free languages and pushdown automata, formal grammars, Chomsky hierarchy, Turing machine and computability, computational complexity; New Value: A survey of the fundamental concepts and conclusions in the theory of computation. Topics cover regular languages and finite automata, context-free languages and pushdown automata, formal grammars, Chomsky hierarchy, Turing machine and computability, computational complexity.

#68, Alter, Course, Prefix, Prerequisites, Course Description, CYBR 408, Principles of Programming Languages, CYSY, CBT, Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value; CYBR; Change in prerequisites; Old Value: CSIT 402 and CSIT 301 or CSIT 330; New Value: CYBR 402 and (CYBR 301 or CYBR 330); Change in course description; Old Value: Study of the essential concepts of programming languages including, language design concepts and semantics; examination of language features and major programming paradigms with a focus on functional programming; and design and implementation of language interpreters; New Value: Study of the essential concepts of programming languages including, language design concepts and semantics; examination of language features and major programming paradigms with a focus on functional programming; and design and implementation of language interpreters.

#69, Alter, Course, Prefix, Title, Prerequisite, Course Description, CYBR 410, Big Data I, CYSY, CBT, Change to the Cyber Systems Department. Update title to reflect content; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course title; Old Value: Advanced Business Intelligence using Neural Networks and Advanced Data Mining; New Value: Big Data I; Change in prerequisite; Old Value: MIS 350; New Value: CYBR 350; Change in course description; Old Value: This course provides an understanding of advanced techniques to extract business intelligence. Neural networks and data mining tools are covered extensively; New Value: This course provides an understanding of data analytics advanced techniques to extract intelligence about organizational activities from big data sources. Managing, governing, extracting, merging, and preparing large data sets for analysis using real data are covered extensively.

#70, Alter, Course, Prefix, Title, Number, Prerequisite, Course Description, CYBR 411, Big Data II, CYSY, CBT, Change to the Cyber Systems Department. Match the course title to the content; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course title; Old Value: Knowledge Management and Expert Systems; New Value: Big Data II; Change in course number; Old Value: 430; New Value 411; Change in prerequisite; Old Value: MIS 350; New Value: CYBR 410; Change in course description; Old Value: This course provides a set of practical and powerful tools to ensure the understanding of knowledge management systems and expert systems. The exposure to computerized tools facilitates development of expert systems; New Value: This course provides a set of practical and powerful tools to enhance the understanding of big data. Exposure to computerized tools facilitating the loading and cleansing of data for analysis provides an experiential learning approach to understanding big data concepts.

#71, Alter, Course, Prefix, Number, Prerequisites, Course Description, CYBR 418, E-Commerce Information Systems, CYSY, CBT; Change to the new Cyber Systems Department. Change number to avoid numbers from merged programs; Change to course prefix; Old Value: CSIT; New Value: CYBR; Change to course number; Old Value 450; New Value: 418; Change in prerequisites; Old Value: CSIT 130 or MIS 302 or CSIT 434 and Sophomore standing or above; New Value: CYBR 101 or CYBR 102 or CYBR 103 or CYBR 302 or CYBR 434. Sophomore standing or above; Change in course description; Old Value: This course will present, develop, explore, and illustrate the nature and use of E-commerce Information System development methodologies in an inter-organizational setting, and discuss responsibilities at all life cycle stages. It is a comprehensive study of electronic commerce, with in-depth coverage of e-commerce technologies and e-commerce business models including business-to-consumer models, business-to-business models, consumer-to-consumer models, peer-to-peer models, and mobile commerce. It introduces global e-commerce, security and encryption issues, and ethical, social and political issues related to e-commerce. E-commerce interface designs for electronic storefronts, malls, catalogs, shopping carts, search engines, auctions, e-payment systems, e-learning, and e-government will be covered. Consumer interactions with payment processing mechanisms and relationships to information technology development and support will be studied; New Value: This course will present, develop, explore, and illustrate the nature and use of E-commerce Information System development methodologies in an inter-organizational setting, and discuss responsibilities at all life cycle stages. It is a comprehensive study of electronic commerce, with in-depth coverage of e-commerce technologies and e-commerce business models including business-to-consumer models, business-to-business models, consumer-to-consumer models, peer-to-peer models, and mobile commerce. It introduces global e-commerce, security and encryption issues, and ethical, social and political issues related to e-commerce. E-commerce interface designs for electronic storefronts, malls, catalogs, shopping carts, search engines, auctions, e-payment systems, e-learning, and e-government will be covered. Consumer interactions with payment processing mechanisms and relationships to information technology development and support will be studied.

#72, Alter, Course, Prefix, CYBR 421, Business Process Redesign and ERP Systems, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR.

#73, Alter, Course, Prefix, Prerequisite, CYBR 422, Computer Graphics, CYSY, CBT, Move to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 330; New Value: CYBR 330.

#74, Alter, Course, Prefix, Prerequisites, CYBR 425, Database Systems, CYSY, CBT, Move to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisites; Old Value: CSIT 112 or CSIT 130 or CSIT 434; New Value: CYBR 101 or CYBR 102 or CYBR 103 or CYBR 434.

#75, Alter, Course, Prefix, Title, Prerequisites, Course Description, CYBR 430, Protecting & Defending Networks & Systems, CYSY, CBT, Change to the Cyber Systems Department. Add a graduate option; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course title; Old Value: Internetworking Design; New Value: Protecting & Defending Networks & Systems; Change in prerequisites; Old Value: ITEC 330 and ITEC 335 and ITEC 345; New Value: CYBR 335 and CYBR 101 or CYBR 102 or CYBR 103; Change in course description; Old Value: This course will cover all the concepts necessary for an overall understanding of the design of information networks, whether they are meant to carry voice, data or video. A case study will be incorporated to achieve a strong understanding of the design and implementation of a complex internetwork. Hands-on labs will be conducted using a variety of network equipment. Students with a strong command of the concepts presented will be prepared to sit for specific industry certification exams; New Value: This course will cover all the concepts necessary defense-in-depth of an enterprise network and system (blue team). A case study will be incorporated to achieve a strong understanding of the design, implementation and overall security of a large network. Hands-on labs will be conducted using a variety of networking and systems equipment. Students with a strong command of the concepts presented will be prepared to sit for specific industry certification exams. This course presents a comprehensive study of needs and characteristics of a global internetwork and the issues encountered on such a network. Topics studied will include security, servers, user identity, and wireless. Hands-on labs will be conducted using a variety of network equipment.

#76, Alter, Course, Prefix, Course Description, CYBR 434, Information Technology Teaching Methods, CYSY, CBT, Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course description; Old Value: This course will include information technology curriculum development and instruction, with a focus on applying programming concepts to K-12 education. Intended only for Teachers. Cannot be applied toward any other Computer Science/Information System Major or Minor; New Value: This course will include information technology curriculum development and instruction, with a focus on applying programming concepts to K-12 education. Intended only for students in education fields.

#77, Alter, Course, Prefix, Title, Prerequisites, Course Description, CYBR 435, Think like an Adversary: Systems Side Security, CYSY, CBT, Change to the Cyber Systems Department. Update title and description based on new technologies. Also, add a graduate level component course; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course title; Old Value: Global Internetworking; New Value: Thinking like an Adversary: Systems Side Security; Change in prerequisites; Old Value: ITEC 330 and ITEC 430; New Value: CYBR 335 and CYBR 101 or CYBR 102 or CYBR 103; Change in course description; Old Value: Students will be exposed to the area of construction control systems and the importance of this area to meeting the budget, quality and time objectives of a project. This course emphasizes strategy development and practical application grounded in accepted theory and techniques; New Value: This course will cover all the concepts necessary to play offense against different types of enterprise networks and systems (red team). Different scenarios will be "played out" utilizing a series of hands-on labs with the idea that students will learn the concept of "thinking like an adversary". In this manner, the students will learn how to better defend networks by understanding the offensive playbook.

#78, Alter, Course, Prefix, CYBR 440, Systems Audit, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR.

#79, Alter, Course, Prefix, Prerequisite, CYBR 441, Artificial Intelligence, CYSY, CBT, Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 150; New Value: CYBR 150.

#80, Alter, Course, Prefix, Prerequisite, CYBR 444, Software Reverse Engineering, CYSY, CBT, Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisite; Old Value: CSIT 301; New Value: CYBR 301.

#81, Alter, Course, Prefix, Prerequisites, CYBR 448, System Administration, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisites; Old Value: CSIT 130 or ITEC 345 or CSIT 434; New Value: CYBR 101 or CYBR 102 or CYBR 103 or CYBR 345 or CYBER 434 or instructor permission.

#82, Alter, Course, Prefix, Prerequisites, Course Description, CYBR 450, Software Quality Assurance, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in prerequisites; Old Value: MIS 381 or CSIT 380; New Value: CYBR 381; Change in course description; Old Value: The software industry has witnessed recently a dramatic rise in the impact and effectiveness of software quality assurance (SQA). SQA has become integrated into all phases of software development. This course provides an overview of various concepts/techniques such as inspection, Pareto principles, software configuration management, capability maturity models, statistical testing methods, software reliability, and software safety. It also distinguishes the variations in SQA applications for mission-critical software and commercial software; New Value: This course will provide students with the knowledge and skills to define and implement software quality management. We will explore ways to develop a quantifiably effective software quality management function and measure the success of quality assurance (QA) plans, teams and tools. The course will explore the latest industry standards, tools and approaches, and will explore the challenges of managing the QA function for modern software application environments.

#83, Alter, Course, Prefix, Prerequisites, CYBR 458, Computer Security, CYSY, CBT, Change to the new Cyber Systems Department; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in prerequisites; Old Value: CSIT 150 or CSIT 448 or ITEC 345 or instructor permission; New Value: CYBR 150 or CYBR 448 or CYBR 345 or instructor permission.

#84, Create, Course, CYBR 460, Virtualization Essentials, CYSY, CBT, This course will be required for the Cyber Security Operations and Information Networking and Telecommunications major programs. This course will be an elective in the IT, Applied CS, and CS Comprehensive majors.

#85, Create, Course, CYBR 468, Advanced Security: Playing Both Sides; CYSY, CBT, New course to meet NSA requirements in the Cyber Security Operations major.

#86, Alter, Course, Prefix, Number, Title, Total Completions Allowed, Total Credits Allowed, Prerequisites, Course Description, CYBR 475, Internship in Cyber Systems, CYSY, CBT, Change to the Cyber Systems Department. Make the number match other internships in CBT; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course number; Old Value: 492; New Value: 475; Change in course title; Old Value: Practicum in Computer Science/Information Technology; New Value: Internship in Cyber Systems; Change in total completions allowed; Old Value: 18; New Value: 6; Change in total credits allowed; Old Value 18; New value: 6; Change in prerequisites; Old Value: CSIT 150 and permission of department chair and documentation of internship employment from intern's site supervisor Student must provide where employed name of supervisor and basic duties primary responsibility for finding internship belongs to student; New Value: • Degree-seeking student at UNK, majoring or minoring in Applied Computer Science, Computer Science Comprehensive, Cyber Security Operations, Data Analytics, Information Networking and Telecommunications, Information Technology, Management Information Systems, MIS Quality Assurance • Completion of prerequisite courses listed in the UNK course catalog, including prerequisite GPA if listed • Have completed at least 1 full semester at UNK; Change in course description; Old Value: This course provides the student the opportunity to gain experience in the application of computer science/computer information technology principles in a variety of settings. Arrangements must be made in writing prior to registering for the course. (A total of 3 credit hours of any combination of CSIT 399 and CSIT 492-495 may be applied toward a computer science/information technology major, minor, or endorsement. A total of 6 credits may be earned for a summer practicum and a total of 3 credits may be earned for a semester practicum.); New Value: An internship is a professional

or technical position in a professional environment that provides a student with sufficient practical work experience for a limited period of time, allows for career decision-making, and provides the employer valuable skills to accelerate business objectives. Internships are mutually beneficial for all involved. The student gains the opportunity to apply classroom learning to a workplace environment; the employer has the chance to work with students eager to learn and apply skills; and the university benefits from connections with business and industry, which provide potential for program development and enhancement. The learning experience is organized and supervised by the academic department, the CBT Career Center, and personnel of selected industries. All internships must be approved by the CBT Career Center. Enrollment in a College of Business & Technology internship course is required. Offered in Fall, Spring, and Summer semesters. The course will be evaluated on a credit/no credit basis.

#87, Create, Course, CYBR 484, Parallel Computing, CYSY, CBT, Change to the Cyber Systems Department. ACM and ABET require more parallel computing concepts to be covered in the Computer Science curriculum. Added an elective course to be offered every other year will allow our students the opportunity to learn more about parallel computing.

#88, Alter, Course, Prefix, Course Description, CYBR 485, Information Systems Strategy and Management, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course description; Old Value: The course provides a set of practical and powerful tools to ensure the understanding of strategic, tactical, and operational responsibilities of the chief information officer (CIO). The strategic responsibilities include the strategic alignment among information technology and business functions of the organizations. MIS 380 is recommended; New Value: To provide a set of practical and powerful tools to ensure the understanding of strategic, tactical, and operational responsibilities of the chief information officer (CIO). The strategic responsibilities include the strategic alignment among information technology and business functions of the organizations.

#89, Alter, Course, Prefix, Number, Course Description, CYBR 490, Information Networking Law and Public Policy, CYSY, CBT, Change to the new Cyber Systems Department. Add a 890P option as well; Change in course prefix; Old Value: ITEC; New Value: CYBR; Change in course number; Old Value 390; New Value: 490; Change in course description; Old Value: Students in this course review statutory law, regulatory law, and case law at the federal, state, and local levels as it is applied to information networking and telecommunications; New Value: This course provides a current and historical review of statutes, regulations, and municipal ordinances in telecommunications and information network security. Fundamental cybersecurity requirements are examined for several industry sectors. Topics also include network breach notification requirements, the NIST Risk Management Framework and NIST Cybersecurity Framework.

#90, Alter, Course, Prefix, Title, Prerequisites, Course Description, CYBR 494, Directed Research in Cyber Systems, CYSY, CBT, Change to the Cyber Systems Department. Match the Research number across CBT; Change in course prefix; Old Value: CSIT; New Value CYBR; Change in course title; Old Value: Directed Research in Computer Science/Information Technology; New Value: Directed Research in Cyber Systems; Change in prerequisites; Old Value: CSIT 150 and permission of department chair; New Value: Junior or senior standing and permission of department; Change in course description; Old Value: Independent original research in computer science/computer information technology under the direction of a computer science/information technology faculty member. A written contract specifying topic and requirements is required before registering for the course. Upon completion of the project a format presentation will be given by the student to all interested parties. (A total of three credit hours in any combination of CSIT 399 and CSIT 492-495 may be applied toward a computer science/information technology major, minor, or endorsement.); New Value: Independent original research in a Cyber Systems area, under the direction of a Cyber Systems faculty member. A written contract specifying the topic and requirements must be submitted and approved by the department before registering for the course. Upon completion of the project a formal presentation will be given by the student to all interested parties.

#91, Alter, Course, Prefix, Title, Number, Course Taken for Credit Multiple Times, Credits Allowed, Prerequisites, Course Description, CYBR 495, Cyber Systems Capstone, CYSY, CBT, Change to the Cyber Systems Department. Merge the capstone courses for the CS, IT, MIS, and INT programs into a single course; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Seminar in Computer Science; New Value: Cyber Systems Capstone; Change in course number; Old Value: 496; New Value: 495; Change in course taken for credit multiple times; Old Value Yes; New Value: No; Change in course credits allowed; Old Value 1-3; New Value: 3; Change in prerequisites; Old Value: CSIT 330; New Value: CYBR 330 or CYBR 381 or CYBR 490; Change in course description; Old Value: Provides experience and background that will prepare the student for an actual working environment. Reinforcement of previous classwork, enhancement of communication skills, and learning to work with people will be stressed. Primary tasks include a team-based computer science project and the study of ethics for computer science professionals. Should be taken in student's senior year; New Value: This course provides experience and background that will prepare the student for an actual working environment. Reinforcement and validation of knowledge gained in previous course work, enhancement of communication skills, and learning to work with people will be emphasized. Primary tasks will include a team-based project using technologies appropriate to the student's program of study, the study of ethics for cyber systems professionals, and project design and development and project oversight using appropriate project management tools. This course also provides opportunity for writing in the cyber systems disciplines.

#92, Alter, Course, Prefix, Title, Number, Course Taken for Credit Multiple Times, Credits Allowed, Course Description, CYBR 498, Special Topics in Cyber Systems, CYSY, CBT, Change to the Cyber Systems Department. Match the number with other CBT special topic courses; Change in course prefix; Old Value: CSIT; New Value: CYBR; Change in course title; Old Value: Special Topics in Computer Science & Information Technology; New Value: Special Topics in Cyber Systems; Change in course number; Old Value 499; New Value 498; Change in course taken for credit multiple times; Old Value: 3; New Value 2; Change in credits allowed; Old Value: 9; New Value 6; Change in course description; Old Value: A course designed to enable students to become knowledgeable of recent trends and issues in computer science and information technology. The course format varies depending on subject matter, instructor and student needs; New Value: A course is designed to enable students to become knowledgeable of recent trends and issues in cyber systems. The course format varies depending on subject matter, instructor and student needs.

#93, Alter, Course, Prefix, Title, Course Taken for Credit Multiple Times, Credits Allowed, Repeatable for Multiple Times in a Term, Prerequisite, Course Description, CYBR 499, Special Problems, CYSY, CBT, Change to the Cyber Systems Department; Change in course prefix; Old Value: MIS; New Value: CYBR; Change in course title; Old Value: Special Problems in Business; New Value: Special Problems; Change in course taken for credit multiple times; Old Value: 18; New Value 6; Change in credits allowed; Old Value: 18; New Value 6; Change in repeatable for multiple times in a term; Old Value: Yes; New Value: No; Change in prerequisite; Old Value: None: New Value: Junior or Senior standing; Change in course description; Old Value: Independent investigations of business problems. Topics to be investigated may be tailored to meet the needs of the student. A case study course designed (1) to integrate the knowledge acquired in other courses in business administration, and (2) to emphasize analysis and decision-making; New Value: Independent investigations of organizational problems. Topics to be investigated may be tailored to meet the needs of the student. The course is designed to integrate the knowledge acquired in other courses in the student's program of study and provides the opportunity for students to conduct independent study on any cyber systems topic not covered by other regularly offered courses. The study topic will be selected in consultation with the supervising cyber system's faculty member. A written contract specifying the topic and requirements must be submitted and approved by the department before registering for the course.

#94, Create, Course, DANC 332, Modern Dance IV, MUS, CFAH, Adding advanced level of technique to train students to be competitive in the professional field.

#95, Create, Course, DANC 346, Ballet IV, MUS, CFAH, Adding advanced level of technique to train students to be competitive in the professional field.

#96, Alter, Program, Engineering Foundations 2+2 (for UNL), PHYS, CNSS, A new proposal between UNK and UNL to offer a 2+2 program in Computer Engineering is in progress. The additional courses are either specific to the requirements for this program or omissions from the original submission that must be corrected (ENGR 10, PHYS 275L, and PHYS 276L).

#97, Alter, Program, English- Writing Emphasis, B.A., ENG, CFAH, ENG 485 is in our Creative Writing minor but was inadvertently left off the BA English- Writing Emphasis degree track.

#98, Alter, Minor, Ethnic Studies Minor, ETHS, CNSS, The WG & Ethnic Studies Advisory Board has agreed to make the following changes to update the list of course electives for the Ethnic Studies minor degree.

#99, Alter, Program, International Studies, B.A., INTS, CFAH, We are adding a couple of additional courses that are appropriate in thematic options but mostly we are adding an entirely new US geographic option so that international students who are also interested in pursuing a major in International Studies may learn about the United States, which for them IS international. We have clarified in the program description that the purpose of the geographic option is for students to learn about a culture different from their home culture. Students will select the geographic option in agreement with the Program Director.

#100, Alter, Course, Credit Hours, JAPN 100, Beginning Japanese I, MODL, CFAH, We are reducing the hours of JAPN courses from 5 to 3 to bring them in line with other Modern Language courses; Change in credit hours; Old Value: 5; New Value: 3.

#101, Alter, Course, Credit Hours, JAPN 101, Beginning Japanese II, MODL, CFAH, We are reducing the hours of JAPN courses from 5 to 3 to bring them in line with other Modern Language courses; Change in credit hours; Old Value: 5; New Value: 3.

#102, Alter, Course, Credit Hours, Title, JAPN 200, Intermediate Japanese I, MODL, CFAH, We are reducing the hours of JAPN courses from 5 to 3 to bring them in line with other Modern Language courses; Change in credit hours; Old Value: 5; New Value: 3; Change in course title; Old Value: Intermediate Japanese; New Value: Intermediate Japanese I.

#103, Create, Course, JAPN 201, Intermediate Japanese II, MODL, CFAH, We are adding a second semester of Intermediate Japanese.

#104, Alter, Minor, Japanese, MODL, CFAH, We are modifying the Japanese Minor to include an additional semester of study at the intermediate level. Credit hours per class are being reduced from 5 to 3 in order to make the Japanese courses consistent with other offerings in Modern Languages. The necessary number of study abroad hours is being reduced accordingly.

#105, Inactivate, Course, MATH 414, Theory of Compound Interest, MATH, CNSS, We are making MATH 414 dormant because we have no intention of offering it any time soon, we have no course syllabus, no faculty who are interested in teaching it. As far as I can tell, this class is not explicitly mentioned on any UNK program of study.

#106, Alter, Program, Molecular Biology Comprehensive, B.S., BIOL, CNSS, We are changing the name of BIOL 309, inactivating BIOL 452, and changing BIOL 450 to a lecture and lab course.

#107, Create, Course, PSCI 362, Dynamics of Humanitarian Crises and Global Society, PSCI, CNSS, The Political Science Department currently does not offer a class focusing on psychological aspects of humanitarian crises. This class fills the gap in the course offerings.

#108, Alter, Program, Political Science, B.A., PSCI, CNSS, This program is being altered with the goal of creating more flexibility for our majors and greater incentives for experiential learning. We have removed the requirement of a Political Thought class which leaves only three required classes for the major

(Senior Seminar, Intro to Political Inquiry, Introduction to International Relations). The removal of the Political Thought requirement is also important given that our only political theorist will be leaving UNK at the end of the semester and there is no guarantee that we will be able to fill this position in the immediate future. In addition, the expansion in the number of classes associated with a specific sub-field provides our students with more choices to complete the required sub-fields for the major. Finally, the increase in the number of potential credits that one can earn with internships (from 6 to 9) as well as language recommending experiential learning will hopefully increase the number of students choosing these options to complete their majors.

#109, Alter, Program, Political Science, B.S., PSCI, CNSS, This program is being altered with the goal of creating more flexibility for our majors and greater incentives for experiential learning. We have removed the requirement of a Political Thought class which leaves only three required classes for the major (Senior Seminar, Intro to Political Inquiry, Introduction to International Relations). The removal of the Political Thought requirement is also important given that our only political theorist will be leaving UNK at the end of the semester and there is no guarantee that we will be able to fill this position in the immediate future. In addition, the expansion in the number of classes associated with a specific sub-field provides our students with more choices to complete the required sub-fields for the major. Finally, the increase in the number of potential credits that one can earn with internships (from 6 to 9) as well as language recommending experiential learning will hopefully increase the number of students choosing these options to complete their majors.

#110, Inactivate, Course, STAT 437, Computer Analysis of Statistical Data, MATH, CNSS, We are making MATH 414 dormant because we have no intention of offering it any time soon, we have no course syllabus, no faculty who are interested in teaching it. As far as I can tell, this class is not explicitly mentioned on any UNK program of study.

#111, Alter, Program, Studio Art Comprehensive, B.F.A., ART, CFAH, The primary update is to add Art 456 Portfolio (2cr) and reduce the credit hours for Art 499 Senior Project (BFA) (1cr). These proposed changes will align with the Visual Communications and Design Program (BFA degree) and how the departments implements the Senior Project to the Studio and Design students.

#112, Alter, Program, Studio Art, B.A., ART, CFAH, The Department is altering the Studio Art BA to better align with the other Art Degree Programs (Art ED, BFA Studio & VCD) Art Core and Foundations courses. The program was never updated with the other Art Degree Programs.

#113, Alter, Minor, Women's and Gender Studies, WSTD, CNSS, The WG&E Advisory Board approved the following changes to update the list of electives for the Women's & Gender Studies minor

GSC – Proposal for Revised GS program
December, 2018

Current GS Program			Proposed GS Program		
	Hours	Total		Hours	Total
<i>Foundational Core</i>			<i>Foundational Core</i>		
Written Communication (ENG 102 required; ENG 101 may also apply here)	3 - 6	12 - 15	Written Communication (ENG 102 required; ENG 101 may also apply here)	3 - 6	9 - 12
Oral Communication	3		Oral Communication	3	
Math	3		Math	3	
Democracy in Perspective	3				
<i>Portal</i>			<i>Portal</i>		
		3			3
<i>Distribution (27 hours required, 24 if student takes ENG 101; 22 hours required minimum; 2 - 5 hours of electives depending on whether ENG 101 was applied above)</i>			<i>Distribution (22 hours required, 19 if student takes ENG 101; 13 hours required minimum, 6 - 9 hours of electives depending on whether ENG 101 was applied above)</i>		
Aesthetics	3 - 6	24 - 27	Aesthetics	3 - 6	19 - 22
Humanities (2 disciplines required)	6 - 9		Humanities	3 - 6	
Social Sciences (2 disciplines required)	6 - 9		Social Sciences	3 - 6	
Natural Sciences (2 disciplines required)	7 - 11		Natural Sciences	4 - 7	
Analytical & Quantitative Thought	0 - 3		Analytical & Quantitative Thought	0 - 6	
Wellness	0 - 3		Wellness	0 - 6	
<i>Capstone</i>			<i>Capstone</i>		
		3			3
Total Program:		45	Total Program:		37

Summary of proposed changes:

- elimination of Democracy in Perspective as a stand-alone category in the Foundational Core; exposure / coverage of democracy concepts will be achieved by requiring students to complete a GS course that has the democracy in perspective designation
- eliminate the requirement that students take courses from multiple disciplines in the Humanities, Social Sciences, and Natural Sciences distribution categories
- altered Portal waiver policy; students transferring 20+ hours of General Studies coursework will be exempt from taking the Portal (students will still need to complete 37 hours of General Studies course work)
- placed a maximum of 3 hours of PE 110 that can be used in fulfillment of Wellness GS credit