Pilot Course Proposal

Submitted by: Keith Peck Building: Hazen High School

Proposed Course Title: College in High School: Networking Fundamentals (A-C)

Grade Level: 9-12 Department: CTE Information Technology

PLEASE ATTACH THE FOLLOWING:
Description of course content and how this course will meet current needs not being met by other courses. Description must also include the needs assessment data.

- Specifically, what will the student know and be able to do as a result of this course?

Course Description:
Who is this course for? This is a hands-on course intended for students with an interest in a career in computer information systems. This course provides students with classroom and laboratory experience in current and emerging network technology. Instruction includes, network terminology and protocols, LANs, WANs, cabling, router programming, ethernet, TCP/IP, and network standards. This is an entry level course that helps students prepare to earn industry certifications.

Course Goals
Complete objectives of Cisco Certification Network Associate Industry Recognized credential that is aligned with 3 Quarters of College Networking/IT.

Learning Objectives:
Are outlined in the Networking Fundamentals A-C Framework attached

Current needs not being met by other courses:

1. Opportunity for students to gain college course credit.
2. Credit is granted based on student work and revisions and not high stakes testing.
3. Leads to Information Technology Careers directly out of high school.

Upon completion of course students will be able to meet the following Washington State K-12 Learning Standards:
Please see attached Framework units 1 -6 for tri 1, units 7 – 11 for tri 2, and units 12-18 for tri 3.

What are the assessments that will be used to determine student achievement of the goals of this course?

Please see attached Framework units 1 -6 for tri 1, units 7 – 11 for tri 2, and units 12-18 for tri 3.

Describe how this course will address:

- **Alignment with Common Core State Standards (CCSS) and/or WA State Essential Academic Learning Requirements (EALRs)**
  - As seen on the attached course framework, this course uses many Math and ELA CCSS. The course also uses some NGSS.
- **Integration of technology**
  - This course is helping students learn how to develop networks and will be using 1:1 devices and lab computers.
- **Infusion of diversity/multicultural perspectives**

    - As a part of all computer science courses students are asked to reflect and identify the social and ethical impacts of technology
    - Students are also given voice and choice in the content and process of the projects.
    - Students are encouraged to infuse their unique identity and culture into creative coding projects.
  - **Integration with other subject areas**
    - Computer programs are created to help solve problems across all disciplines. Each project will connect to appropriate subject areas like graphs and maps connecting to Math or searching and sorting connecting to text analysis.
  - **Provision of appropriate experiences for learners of varying abilities**
    - Differentiation options are built into the lessons so that all students can be successful in every lesson.
    - Universal Design for Learning and problem based learning used in this class provide students with varying abilities many way to access materials and demonstrate learning.
    - This course offers a great opportunity for students identified as Highly Capable to advance their education while remaining in our high school building(s).
    - This course can provide the challenge that many students are looking for, while keeping them in our building. To ensure success, and college credit, AP Computer Science A is a prerequisite requirements prior to student registration/enrollment.
  - **Development of higher level thinking and processing skills**
    - Students will be able to work mostly within Application, Analysis, Evaluation, and Creation levels of Bloom's Taxonomy, although there are many other skills that will be practiced from other tiers too (like remembering and understanding information). Due to the nature of this course, being a College in the High School course, students will engage in higher levels of thinking on a daily basis.
  - **Articulation of scope and sequences across grades K-12. Will this course replace an existing curriculum? If so, which course?**
    - This will replace Networking A-C dual credit at LHS to provide students with CIHS programming and free college credits.

Current Scope and Sequence:

- See attached framework.

Statement of impact:

- This course will impact students by allowing them to earn college credit while in high school, without the high-stakes standardized test as a barrier.
- It will develop students' critical thinking skills through developing algorithms to solve problems.
- Students will get second level college course credits.

Instructional materials and cost (include titles, names of publishers and copyright):

- Most resources are online and free to the instructor.

SIGN-OFF FOR PILOT COURSE RECOMMENDATION

	Signature	Date
1. Department Head (Secondary) Accepts ☐ Rejects ☐		
2. Principal Accepts ☐ Rejects ☐	Thomas Call	05/09/24
3. District Content Facilitator Accepts ☑ Rejects ☐	Keith Peck	5.9.24
4. Curriculum Director Accepts ☐ Rejects ☐		

Return original to the Director of Curriculum and Instruction. Copies to Principal and Course Originator.