Honors Networking 1-2
Course Syllabus

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Plan Periods: A5, B2
Office Room 136
Best times to contact: After 3:15 or via email

Course Description

The CCNA Routing and Switching introductory courses introduce the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of either course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

Instructional Philosophy

This course is taught all over the world in over 70 different languages. The Internet and networks are in every country in the world. We need people skilled in operating and maintaining these networks. This course will give that knowledge.

Content Standards

Students who complete Networking 1-2 will be able to perform the following tasks:

- Understand and describe the devices and services used to support communications in data networks and the Internet
- Understand and describe the role of protocol layers in data networks
- Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
- Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks
- Explain fundamental Ethernet concepts such as media, services, and operations
- Build a simple Ethernet network using routers and switches
- Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations
- Utilize common network utilities to verify small network operations and analyze data traffic

Major Units of Study

Network Basics
4 Layer Network Model
Subnetting
Network Troubleshooting

Course Expectations

Late Work: All assignments given will include a due date. The work is expected to be completed by this date. At grade report time, all incomplete or missing assignments will be recorded as a Missing. If you are falling behind on class work, see me to resolve the situation.

Absence: Honors Networking 1-2 is a lab-based, project-based class. It is vital to your success that you are present in class each day we meet. Any absence from class will need to be followed by time before or after school.

Tardies: Any amount of tardiness will not be tolerated.

Exams: There will be in-class labs, unit exams, and semester final exams. All students will be expected to take the exams on the assigned day. If absent on the day of the test, it must be made up on the student’s own time.

Technology Use: Students in this class will spend 80% of class time with access to computers. Abuse of this privilege will result in removal from some or all computer access at North High School. Use of email, internet, or games will not be tolerated and will have detrimental effects on your grade in the class. Efficient use of your time is required to complete assignments on time. I strictly follow the district policy on computer and email use, and will not hesitate to apply the consequences for its misuse.

Texts
None

Assessment

Formative Assessment: study guides, in-class labs

Summative Assessment: chapter exams, semester exams

District Grading Policy

Grading Scale/Calculation
All coursework and assessments are judged based on the level of student learning from “below basic” to “advanced.” This course will provide multiple opportunities to achieve at the “proficient” to “advanced” levels. Students are evaluated based on a proficiency scale or project rubric. Proficiency scales for this course are available upon request (teacher will identify location such as portal, teacher website, attached, etc.)
There are three types of coursework

- **Practice** – assignments are brief and done at the beginning of learning to gain initial content (e.g., student responses on white boards, a valid sampling of math problems, keyboarding exercises, and diagramming sentences, checking and recording resting heart rate). Practice assignments are not generally graded for accuracy (descriptive feedback will be provided in class) and are not a part of the grade. Teachers may keep track of practice work to check for completion and students could also track their practice work. Practice work is at the student’s instructional level and may only include Basic (2) level questions.

- **Formative (35% of the final grade)** – assessments/assignments occur during learning to inform and improve instruction. They are minor assignments (e.g., a three paragraph essay, written responses to guiding questions over an assigned reading, completion of a comparison contrast matrix). Formative assignments are graded for accuracy and descriptive feedback is provided. Formative work may be at the student’s instructional level or at the level of the content standard. Formative assessments/assignments will have all levels of learning – Basic (2), Proficient (3), and Advanced (4), which means that for every formative assessment/assignment, students will be able to earn an Advanced (4). Teachers will require students to redo work that is not of high quality to ensure rigor and high expectations. The students score on a formative assessment that was redone will be their final score.

- **Summative (65% of the final grade)** – assessments/assignments are major end of learning unit tests or projects used to determine mastery of content or skill (e.g., a research paper, an oral report with a power point, major unit test, and science fair project). Summative assignments are graded for accuracy. Summative assignments assess the student’s progress on grade level standards and may not be written at the student’s instructional level. Summative assessments/assignments will have all levels of learning – Basic (2), Proficient (3), and Advanced (4), which means that for every formative assessment/assignment students, will be able to earn an advanced (4).

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<th>OPS Grading Scale</th>
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**Missing Coursework**
Work not turned in at all will be recorded in Infinite Campus (district grade book) as an M for missing which calculates to a score of zero.

**Redoing/Revising Coursework**
Students may be allowed redos and revisions of coursework for full credit during that unit of study based upon the teacher’s professional judgment and evidence collected throughout the unit. Scores for student work after retaking, revision or redoing work will not be averaged with the first attempt at coursework or assessment, but will replace the original student score.
Late Coursework
Students are expected to complete coursework on time. Late coursework may be accepted for full credit until the end of the unit based on the teacher’s professional judgment and evidence collected throughout the unit. Accepted late work will not result in a reduction, and the M (missing) will be replaced with the score earned by the student. The teacher or school may make exceptions depending up on student circumstances (such as prolonged absences due to illness).