

Glencoe/McGraw-Hill

**Technology Interactions ©2003
Technology Education, 7–12; A. 7–8
1. Exploring Technology Systems
ISBN# 0–07–829726–5**

correlated to

**North Carolina
Technology Education
Course Blueprint for 8108 –
Exploring Technology Systems**

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES	PAGE REFERENCES
A INTRODUCTION	
001.00 Apply communication, leadership, and lab safety and management skills.	
001.01 Explain appropriate lab, classroom, and teaming skills.	SE: 33, 35–36, 146–147, 150–151, 153 TRG: 46–50, 55–60
001.02 Apply management, leadership, and communication skills through classroom experiences and student activities. (TSA)	This objective is addressed throughout the text. See for example: SE: 22–23, 56–57, 70–71, 102–103, 128–129, 146–147, 105–151, 238–239, 344–345, 418–419 TRG: 87–94
01.03 Create a Career Development Plan.	The opportunity to address this objective is available. See the following: SE: 28, 64, 82, 96, 112, 134, 156, 178, 202, 226, 244, 262, 284, 306, 324, 346, 368, 388 TRG: 83–86
B NATURE OF TECHNOLOGY	
002.00 Analyze the relationship between technology and society.	
002.01 Explain the characteristics and scope of technology.	This objective is addressed throughout the text. See for example: SE: 66, 84, 114–115, 158–159, 180–181, 228–229, 246–247, 326–327, 370–371 TRG: 97–98

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES		PAGE REFERENCES
002.02	Explain the 7 major areas of Technology and distinguish between the natural world and the technological world.	SE: 17–21 TRG: 97–98
002.03	Explain the relationships among the core concepts of technology	SE: 17–21 TRG: 98
002.04	Analyze the relationships of the different technologies and their connection with other fields of study.	This objective is addressed throughout the text. See for example: SE: 28, 54, 105, 162, 234, 294, 363, 396, 421, 452 TRG: 98
002.05	Create a product that shows the different areas of technology and its relationship with society.	This objective is addressed throughout the text. See for example: SE: 22–23, 38, 58–60, 110–111, 146–147, 150–151, 172, 176–177, 214–215, 282–283, 314–315, 334–335 TRG: 97
C TECHNOLOGY AND SOCIETY		
003.00 Analyze the relationships between technology and society.		
003.01	Explain the tools and processes used to assess technologies	SE: 39, 40, 379 TRG: 109–116, 129–130

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES	PAGE REFERENCES
003.02 Assess how cultural, social, economic, political, historical and environmental factors affect technology and are affected by technology. (Technology Assessment)	This objective is addressed throughout the text. See for example: SE: 61, 79, 109, 152–153, 223, 279–281, 320, 343, 407, 436–437 TRG:
D DESIGN AND PROBLEM SOLVING	
004.00 Apply Problem solving and design methods	
004.01 Explain the nature of design and the design/problem solving model	SE: 31–36, 39–41 TRG: 107–108
004.02 Apply design and problem solving concepts and principles	SE: 31–36, 38–39 TRG: 107
E ABILITIES FOR A TECHNOLOGICAL WORLD	
005.00 Apply technological tools and systems to real world experiences.	
005.01 Explain the concepts used to develop and maintain technological products and systems.	SE: 31–36, 39–41 TRG: 97–98
005.02 Use computers and other tools of technology in various applications	SE: 26–27, 56, 146–147, 172–173, 191, 208–209, 312, 354–355, 386–387, 438–439 TRG: 107, 117, 119, 121, 123–125, 127

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES	PAGE REFERENCES
F THE DESIGNED WORLD: MEDICAL AND AGRICULTURAL TECHNOLOGY	
006.00 Assess how medical and agricultural technology affects society.	
006.01 Explain how medicine, healthcare, and agriculture have been improved by inventions and innovations.	SE: 247, 249–250, 253–255, 258–259, 265–267, 269–274, 276–281 TRG: 139–142
006.02 Describe genetic engineering, including its role in modifying the structure of DNA to produce new biotechnology products.	SE: 216–218, 247, 259, 272, 293–303, TRG: 140
006.03 Evaluate how healthcare, medicine, agriculture, and biotechnology influence and is influenced by economics, politics, and the environment. (Report – Research)	SE: 273–274, 276–278 TRG: 142
006.04 Apply the principles of medical, biotechnological, and agricultural technology in an activity.	SE: 251, 256, 268, 275 TRG: 139, 141
G THE DESIGNED WORLD: ENERGY, POWER, AND TRANSPORTATION	
007.00 Apply principles of energy, power, and transportation.	
007.01 Describe the types and forms of energy, and scientific principles of energy, power, and transportation.	SE: 182–183, 185–190, 192–197, 212–213, 216–218, 220–222, 229–230, 232–236, 294–303, 358–361, 402–407, 416–417 TRG: 133–138, 143–144

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES		PAGE REFERENCES	
007.02	Describe systems, sub-systems, and modes of transportation systems.	SE:	23–24, 205–213, 219–223
		TRG:	99–105, 133–136
007.03	Design and fabricate a transportation vehicle.	SE:	191, 192–193, 208–209, 224–225, 238–239
		TRG:	133
H THE DESIGNED WORLD: COMMUNICATION SYSTEMS			
008.00 Analyze and produce communication products.			
008.01	Explain the components and types of communication systems.	SE:	49–50, 52–55, 57, 60–61, 67–73, 75–79, 115–119, 122–127, 130, 309–311, 313–320
		TRG:	101
008.02	Produce a communications product using one of the following: technical drawings, graphic communication, electronic communication.	SE:	56, 58–59, 62–63, 70, 80–81, 132–133
		TRG:	117, 119, 121, 123, 125
I THE DESIGNED WORLD: PRODUCTION SYSTEMS			
009.00 Explain and apply principles of manufacturing and construction.			
009.01	Explain the concepts and principles of manufacturing systems.	SE:	139–152
		TRG:	127–128
009.02	Explain the concepts of separating, forming, combining, and conditioning.	SE:	142–146
		TRG:	128

**GLENCOE/MCGRAW-HILL
TECHNOLOGY INTERACTIONS ©2003**

CORRELATED TO

**NORTH CAROLINA
COURSE BLUEPRINT FOR 8108 – EXPLORING TECHNOLOGY SYSTEMS**

OBJECTIVES		PAGE REFERENCES	
009.03	Create a manufactured product.	SE:	146–147, 150
		TRG:	127
009.04	Explain the concepts and principles of structural systems.	SE:	159, 161–174
		TRG:	131–132
009.05	Create a structure.	SE:	172–173, 176–177
		TRG:	131

GLENCOE/McGraw-Hill
Atlantic Southeast Region
6510 Jimmy Carter Boulevard
Norcross, GA 30071
770/613-0281
800/731-2365