

Syllabus

Course Title: Tech 1 (Foundations of Technology)

Course Schedule: January 24 – June 6, 2007 (B Days)

Reference

Materials:

Hutchinson, J. & Karsnitz, J.R. (1994). *Design and problem solving in technology*. Albany: Delmar Publishers, Inc.

Savage, E.N., Rossner, A.G., & Finke, G.D. (1993). *Bio-related technology*. Albany: Delmar Publishers Inc.

Wright, R.T. (2004). *Technology*. Tinley Park, ILL: Goodheart-Wilcox Company, Inc.

Electronic

Resources:

<http://www.usoe/k12.ut.us/ate>

<http://www.geocities.com/forsolrac>

Instructor's Name: Jolette Bush

Instructor's Email: innovatinggeeks@gmail.com

Alternate Email: Jolette.bush@jordan.k12.ut.us

Tech Group URL: <http://groups.google.com/group/innovatinggeeks>

Availability: Mon., Wed., Fri, 7:00 – 7:45 AM
Mon-Fri, 2:25 – 3:00 PM
MSN IM: pneumaticcranium@hotmail.com

Welcome:

Welcome to class. For most of you, this will be the first time you've had a syllabus for a class. A syllabus outlines the format of the class, assignments and grading rubrics, deadlines, and schedule. For this class, you will be required to develop a digital portfolio in the form of website. You may use whatever provider you desire except MySpace.com. All of your assignments will be posted to your portfolio for credit.

Think of me as a facilitator, guiding you in your technological education and literacy. I expect you to come to class on time and prepared. I have high expectations for my students and I want each of you to excel at your strengths and improve upon your weaknesses. As such, you will be held accountable for meeting deadlines and submitting your best work.

Course Description: Foundations of Technology is a comprehensive action-based educational course concerned with technical means, their evolution, utilization, and significance within industry, its organization, personnel, systems, techniques, resources and products, and their social/cultural impact. It is a foundational course introducing students to web design, entertainment technology (RPG maker), critical thinking and problem solving, technical writing and the influences of technology. It is a prerequisite to Tech 2.

Purpose and Approach: The purpose of Tech 1 is to prepare students for further exploration of technological careers and classes, including the Film Academy. As all technology courses, this is a hands-on, team-oriented course wherein you will complete team assignments as well as individual assignments. You are encouraged to begin exploring educational pathways corresponding to your individual interests.

Participation: Forty percent of your grades will be earned through attendance and participation in classroom activities, including discussion questions and a weekly summary (IC).

Weekly Implications And Conclusions: At the end of each week, you are required to develop a short paragraph describing what you have learned during the week and how it applies to your other course work and future careers. The paragraph will be posted to your website and the Tech Group URL. This statement may also include questions for me regarding material that may still be unclear.

Weekly Discussion Questions: Each week, you will respond to a discussion question (DQ) about the week's learning. These DQs must include the weekly vocabulary terms and be at least 150 words in length. You will post these responses to your website and the Tech Group URL.

Learning Team Concepts: Because teamwork is such a vital commodity in the work world, you will be required to work in teams and develop a team charter, indicating each of your strengths, weaknesses, and goals. The team charter will be emailed to me at the beginning of each new unit and posted to the Tech Group URL.

Teams will use Tuckman's (1965) forming, storming, norming, and performing team development model to ensure successful teamwork and develop leadership qualities. In addition, at the end of each team activity, you will email me a learning team evaluation form.

Academic Honesty: Academic honesty is highly valued at West Jordan High School. As such, your work must represent your original words and ideas. In addition, you must cite all sources used whether electronic or hard copy, using the APA citation format. Plagiarism will result in failing the assignment.

Grading Criteria: All assignments are due by the date noted on the calendar, no later than 10pm. If you know you will not have access to the Internet on the due date, you may submit the assignments, including DQs, ICs, and Team Evaluations as soon as they are completed. Please email me when you have posted them to your website and Group. Late assignments are worth 50% and nothing will be except after the drop-date date on the calendar.

Scoring for DQ, IC And participation: DQs earn a maximum of 15 points each and will impact the portfolio grade. The weekly IC statement earns 30 points per week and will impact the participation grade. On-time, on-task participation earns 10 points per week and impacts the participation grade. Team evaluations and charters earn 25 points each and impact the participation grade. The participation grade represents 40% of the overall course grade. The other 60% is comprised of portfolio assignments.

Grade breakdown: Please refer to the course disclosure statement for grade breakdown details.

STANDARDS FOR WRITTEN WORK

Depth of scholarship

Assignments should represent your careful, thoughtful approach to cover the key elements of the topic thoroughly. Content should go beyond mere description or paraphrasing.

Originality of ideas and research

All assignments must demonstrate a unique, creative approach to the problem being studied and represent your original work.

Theoretical and conceptual framework

Assignments should display your understanding of the concepts relevant to the topic.

Grammar and spelling

Students should follow the six traits+1 writing traits for all assignments.

Grading scale for Written Work:

Criteria	Weighting
Depth of scholarship	10%
Originality of ideas and research	40%
Theoretical and conceptual framework	40%
Grammar and spelling	10%

Biotechnology

- Conservation
- Engineering design and ecosystem management
- Human factors engineering
- Biomaterial applications
- Nanotechnology

Construction and Manufacturing

- Systems and subsystems
- Chemical technologies
- Marketing products
- Construction designs

Influences of Technology

- Political influences
- Economical influences
- Historical and futuristic influences

Information and Communication

- Basic web design
- Entertainment technology – Game design

Medical Technology

- Biochemistry
- Advances and innovations

Transportation

- Transportation systems

Point Values for Assignments

3rd Quarter	Total Possible Points	4th Quarter	Total Possible Points
DQs	75	DQs	45
ICs	120	ICs	120
Team Evals	100	Evals	50
Team Charters	100	Team Charters	50
Disclosure	25	Disclosure	N/A
Receipt	25	Receipt	N/A
Assignments	500	Assignments	700
Final Exam	N/A	Final Exam	100
Total	945		1065

Course Schedule and Due Dates

1/24 (Wed) Disclosure Syllabus Website	1/26 (Fri) DQ due	1/30 (Tue)	2/1 (Thurs) Web site due IC due Disclosure due	
2/5 (Mon) Team charter due	2/7 (Wed)	2/9 (Fri) DQ due Receipt due	2/13 (Tues)	2/15 (Thurs) IC due Tech Project due Team eval. due
Influences of Technology				
2/20 (Tue) Team charter due	2/22 (Thurs) DQ due	2/26 (Mon)	2/28 (Wed) PTC IC due MFG project due Team eval due	
Construction and Manufacturing				
3/5 (Mon) Team Charter due	3/7 (Wed)	3/9 (Fri) DQ due	3/13 (Tue)	3/15 (Thurs) IC due Biotech project due Team eval due
Biotechnology				
3/19 (Mon) Team charter due	3/21 (Wed) ISM Workshop Substitute	3/23 (Fri) DQ due	3/27 (Tue) Substitute??	3/29 (Thurs) EOQ Medical project due Team eval due
Medical Technology				
4/3 (Tue) Team charter due	4/10 (Tue)	4/12 (Thurs) IC due Team eval due		
Transportation Technology and Systems				
4/16 (Mon)	4/18 (Wed) Substitute	4/20 (Fri) DQ due Assembly Schedule	4/24 (Tue)	4/26 (Thurs) IC due Transportation project due Team eval due
4/30 (Mon) Team charter due	5/2 (Wed)	5/4 (Fri) DQ due	5/8 (Tue)	5/10 (Thurs) IC due
Information and Communication				
5/14 (Mon) Review for final	5/16 (Wed) Senior Assembly Review for final	5/18 (Fri) DQ due Review for final	5/22 (Tues) Review for final	5/24 (Thurs) Final Exam
5/29 (Tue) IC due Games due	5/31 (Thurs) Drop-dead Day Course review due	6/4 (Mon)	6/6 (Wed) Last day of School	