

Southgate Anderson High School
Construction Trades Course Syllabus
Southgate, Mi. 48195
734 246-4611 ext. 257

Course Name:	Construction Trades I, II & III
Course Number:	Refer to Southgate Course Description Guide
Course Credit:	1 per Trimester
School Year:	2008 / 2009
Instructor:	Mr. Scott Ferrante

Course Description:

Construction Trades is designed to give the student (both male/female) in depth instruction in problem solving, critical thinking, safety procedures, and skills in various trades that will help build a solid foundation for tomorrow's careers. Assignments in the classroom will include technical writing, informational reading, applied math, and hands on work in both an individual and team environment.

Course Objectives:

- 1.) Identify and properly use tools/equipment of various skilled trades.
- 2.) Develop safe working habits, Identify unsafe working conditions.
- 3.) Prepare to take an apprenticeship entrance exam.
- 4.) Through hands on experience develop skills that will be useful throughout their life both in industry and at home.
- 5.) Develop problem solving and critical thinking techniques.
- 6.) Demonstrate working effectively both in teams and individually.
- 7.) Develop techniques to read, write, compute, and verbally communication in the skilled trades industry.
- 8.) Use of applied math in all trades.

Student Competencies: The Construction Trades instructional program shall be a two-year, eleven/ twelfth grade program designed to prepare students in masonry, carpentry, welding, electrical, and plumbing using the state of

Michigan's 12 Segments. The instructional program content is based on an industrial Advisory Committee's input, both state/national CTE standards along with input from higher level of education Trade Schools. The program is adjusted to meet the current requirements of all these fields. This course is an extremely hands-on course where total student participation is required. Students will be able to take both written and hands-on tests for possible future employment.

Required Text: Provided by instructor.

References & Other Resources:

Selected Resources:

Textbooks:

- 1.) Kicklighter, Clois E., Modern Masonry, Goodheart-Willcox, Tinley Park, Illinois, 1997.
- 2.) Feirer, John L. and Gilbert R. Hutchings, Carpentry and Building Construction, Gleancoe/McCraw, Peoria, Illinois, 1997.
- 3.) Althouse, Andrew D. and Carl H. Turnquist, Modern Welding, Goodheart-Willcox, South Holland, Illinois, 1984.
- 4.) Holzman, Harvey N., Modern Residential Wiring, Goodheart-Willcox, Tinley Park, Illinois, 2002.
- 5.) Blankenbaker, Keith E., Modern Plumbing, Goodheart-Willcox, Tinley Park, Illinois, 1997.

Course Advisory Committee:

Advisory Committee Roster

Scott Ferrante- Construction Teacher

Bert Toschi - Retired

Adam Sordly - Carpenter (Apprentice)

***Nathan Nestor – Mason (Journeyman)**

Jeff Sordly – Business Owner (RJAC)

Danny Tyrna – Carpenter (Apprentice)

Jason Schiller – Mason (Journeymen)

Mark Chretien – Technician Assistant

Angel Lopez - Labor

Ted Hayman – Electronics Instructor

Blake Browe – Student

Dawn Olson – Counselor

Craig Minckiewicz – Pile Driver (Apprentice)

Class Assignments:

- 1.) Safety Quizzes will be given for each trade covered during the school year.
- 2.) Group projects will be performed.
 - a.) 100 points team during group project
 - b.) 100 points individual performance during group project
 - c.) 100 points for write up on group project
- 3.) Daily grades for individual projects (0-10 points) / Worksheets
- 4.) Test upon completion of section 100 points
- 5.) Final test 100 points

Attendance is a requirement in a hands on course; points will be lost due to poor attendance/tardies

Grading: Standarder grading rubric scale used.

Final Exam: The final exam will be 20% of the student's grade. It will be comprised of two portions, hands-on and written. The written part will be 1/3 of the exam grade with the hands-on being the final 2/3.

Class Policies:

CLASSROOM POLICIES FOR CONSTRUCTION TRADES 1, 2 & 3

- 1.) NO ONE WILL INTERFERE WITH SOMEONE ELSE'S LEARNING!**
- 2.) Everyone can do well in this class! All you need to do is pay attention and put forth your best effort. It's all **your choice**.
- 3.) Being a hands-on classroom, your participation in classroom discussion and activities is essential therefore, **your participation** as well as **your attendance** are a major part factored into your final grade.
- 4.) **You** are responsible for coming to class on **time** and **being prepared** to learn.

- 5.) You must have **YOUR PLANNER** to leave this classroom.
- 6.) **Phones, pagers, head phones / C. D. players, I-pods, electronic games, playing cards and hats** are not permitted in this classroom and will be **CONFISCATED**.
- 7.) Absolutely no **food, gum, or drinks** permitted in this classroom at anytime.
- 8.) Absolutely no swearing at anytime.
- 9.) Due to the possibility of injury in this type of classroom setting, **YOU MUST FOLLOW ALL THE SAFETY RULES**. There will be no exception.
- 10.) You will be required to wear the proper clothing in this classroom. **Students will not be permitted to participate in hands on classroom activities and will receive a zero for daily participation grade. (No sandals or slippers at anytime in classroom)**
- 11.) You must treat all equipment with respect, you will be responsible for any damage due to misuse of equipment.
- 12.) If something is broken or unsafe, notify the instructor immediately.
- 13.) A student caught **stealing** equipment or **engaging in unsafe practices** will be dealt with in a prompt and stringent manner.

Overall, if you respect these guidelines and **adhere to the safety rules**, you are going to have a rewarding learning experience. I/we are always here if you have any problems or need help, so don't be afraid to ask.

STUDENT'S NAME: _____

DATE: _____

PARENT'S NAME: _____

DATE: _____

Mr. Ferrante / Mr. Chretien/ Mr. Toschi

Evaluation & Grading: **Construction Trades**

Grading Scale

	A	B	C	D	E
Class Attendance	Came to class everyday. On time everyday	Came to class everyday. Late one time that day.	Came to class everyday. Late twice in one day.	Came to class everyday. Late twice in one day.	Came to class everyday. Late twice in one day.
Participation	Participated enthusiastically and thoughtfully all the time in discussions and activities	Voluntarily participated most of the time in discussions, activities and groups	Voluntarily participated minimally in discussions, activities and groups	Reluctantly participated only when called upon for a few discussions, activities, and groups	Did not participate in any discussions, activities or groups activities
Effort	Showed enthusiastic and thoughtful effort all the time in individual or group work	Showed effort most of the time on their own in individual and group work	Showed some effort only when asked to in individual and group work	Showed minimal effort only when pressured to for individual or group work	Showed no effort in individual or group work
Assignments/ Reflections	Completed all in class and take home assignments with creativity, neatness, and thoughtfulness	Only some of the assignments were creatively and neatly done	All assignments were completed with minimal creative effort	Completed only some in-class and take-home assignments	Did not complete any in-class or take-home assignments
Tools	Used every opportunity to advance self in knowledge and skill with the tools available	Used all tools available to advance skill level	Used only select tools to advance skill level	Used the tools available only when told to	Did not use the tools available to the utmost advantage

Course Outline:

Major Topics to be covered:

Masonry:

- Construct cinder block walls
- Mixing of mortar
- Proper use/identification of Masonry tools
- Blueprint reading
- Applied math
- Reading a ruler/tape measure
- Safety procedures in masonry
- Individual / group project

Carpentry:

- Framing walls techniques
- Nailing techniques
- Individual / group project
- Proper use/identification of carpentry tools: hand/power
- Blueprint drawing and interpretation: residential
- Drywall techniques
- Hanging doors/windows
- Safety procedures in carpentry
- Applied math
- Reading a ruler/tape measure

Welding:

- Proper use/identification of welding equipment
- Proper use of oxygen/acetylene cutting torch
- Learn four welding positions
- Read welding blueprints
- Arc, mig, tig and oxygen/acetylene welding
- Five joint welds
- Safety procedures for all types of welding and torch use
- Individual project

Electrical:

- Basic house wiring
- Electrical codes (NEC)
- Proper usage/identification of electrical tools
- Blueprint drawing: residential
- Identify series/parallel circuits
- Identification of electrical symbols
- Conduit bending
- Applied math
- Safety procedures used in the electrical field
- Individual / group project

Plumbing:

- Plumbing symbols identification
- Sweat soldering copper tubing
- Blueprint layout/interpretation: residential/industrial

- Proper use/identification of plumbing tools
- Identify different materials used in plumbing
- Applied math
- Safety procedures used in plumbing
- Individual / group project

Articulation Agreements:
Wayne County Community College