



**MPHS CTE**

**Week 3/30-4/3**

# Arts/AV Classes

## Week 1

Classes include Principles of Arts/AV and Communications, Photography, Yearbook, Audio/Video Production, TNT

Watch the following two videos if you are a student in Principles of Arts/AV, Photography and Yearbook.

1. 5 Cool Canon Camera tips for better photography

<https://www.youtube.com/watch?v=VM67OEA8zWA>

2. 10 Photography Tricks to go viral

<https://www.youtube.com/watch?v=DP6UtePp8yw>

Watch the following two videos if you are a student in Audio/Video Production and TNT.

1. How to Make a YouTube Video (Beginners Tutorial)

<https://www.youtube.com/watch?v=aB0TlsnkY6E>

2. We are AV Production

<https://www.youtube.com/watch?v=jvcnYqR19BM>

If you are in yearbook and can work on yearbook pages, please contact Mr. Whitten either at 903-563-4252 or email at [jwhitten2@mpisd.net](mailto:jwhitten2@mpisd.net). All you need to have is a computer at home with internet service.

Here is the link for the yearbook

<http://sw.balfour.com/check.jsp?dest=http://sw.balfour.com/tops>

If you have any questions, email your teacher. We miss you all!  
[jwhitten2@mpisd.net](mailto:jwhitten2@mpisd.net), [tporter@mpisd.net](mailto:tporter@mpisd.net), [dmccarley@mpisd.net](mailto:dmccarley@mpisd.net)

# Ag Science Packet

Week of March 30<sup>th</sup> through April 3<sup>rd</sup>

**Directions:** If you are taking any class instructed by Mr. Rice, Mrs. Coberley, Ms. Hearron and Mr. Hunnicutt then do the following assignment. There is an article called “The FFA Roots of a Garden Party” by Bev Flatt. Please read the article then answer the questions on the following page. That page is labeled “Appendix 1: The FFA Roots of a Garden Party”. The internet is not required for this assignment, please answer the questions to the best of your abilities after reading the article.

NAME: \_\_\_\_\_

Aligned to the following standards:  
PS.04; CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-J; FFA.CS-N; AG-PL4;  
AGPB01.04; CCSS.ELA.RI.9-10.2; CCSS.ELA.RI.9-10.3; CCSS.ELA.RI.9-10.4; MP1; MP2;  
MP4; MP5; MP6; CRP.02; CRP.04; CRP.06; CRP.08

# Appendix 1: The FFA Roots of a Garden Party

Created: Spring 2020 by the National FFA Organization  
Part 1

## DIRECTIONS:

Read the article "The FFA Roots of a Garden Party" in the spring 2020 issue of *FFA New Horizons* and complete the following activities.

What career development event (CDE) did Mary and Dawn win that started the passion that would later become their business?

- a. Agricultural sales
- b. Marketing plan
- c. Nursery and landscape
- d. Floriculture



How long did Coombs work in a local floral shop after winning the CDE?

- a. One year
- b. Two years
- c. Three years
- d. Four years

What two passions were cultivated through her job and CDE experience?



\_\_\_\_\_

\_\_\_\_\_

What did they do in high school to help their FFA chapter grow and develop?  
\_\_\_\_\_ and \_\_\_\_\_

What did they do in college to help their business move forward?



In their business, the sisters stick to their agricultural background by ...

"Success is born from hard work and staying power that comes with experience and education." — Coombs



What does this quote mean to you? Why?

Go to [AgExplorer.com](https://www.agexplorer.com) and explore the florist career.

What does a florist do?

Identify five skills needed to be a successful florist.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What education is required to become a florist?

What would you say to someone that might be interested in being a florist?



What impact does the floral industry have on the economy?

How could the floral industry impact you now or in the future?



## THE FFA ROOTS OF A GARDEN PARTY



Mary Coombs (left)  
and sister Dawn Clark.

**INTERNATIONAL WOMEN'S DAY IS CELEBRATED IN HUNDREDS OF COUNTRIES AROUND THE WORLD ONCE A YEAR. THESE SISTERS WILL CELEBRATE WITH THE CONTINUED SUCCESS OF THEIR TWO AGRICULTURAL BUSINESSES.**

**A**t age 16, many FFA members celebrate the earning of a driver's license, the transition to becoming an upperclassman, or even the earning of their first college credits. For sisters Mary Coombs and Dawn Clark, 16 was the age they found their passion for floriculture and the beginning of a successful career in horticulture. After enrolling in agriculture classes at Woodstown High School in New Jersey, Coombs and Clark competed in the floral design career development event (CDE). After winning the competition, Coombs was offered a job at a local flower shop where she cultivated her passion for entrepreneurship and floral design for the next three years.

"Without the early exposure to this craft during our agricultural education courses, who knows where we would be," Coombs says. "The real-life experience offered through FFA led us to great opportunities at a young age."

Today, the sisters own a full-service floral and event design company called A Garden Party. Together, their business produces more than 100 events per year, and the sisters are known for their from-the-garden approach. Staying true to their agricultural background, they emphasize the importance of using homegrown and locally produced blooms and foraged materials in all of their designs. Recently, this duo opened a new division of the company by renovating the family milking parlor into an events space.

"During high school, we wrote grants and completed applications to help our FFA chapter grow and develop," Clark says. "While in college, we drafted a business plan, which gave us the confidence to launch our company upon graduation. Thirteen years later, our business is still growing and flourishing because we are dedicated to continuing our education and keeping the business fresh and evolving."

As lifetime members of National FFA Alumni and Supporters, Coombs and Clark attribute much of their success to the solid foundation built as FFA members. Through competing in CDEs, acting as leaders in their chapter and pursuing their agricultural passion, they learned the value of making a plan, saving money, being patient and working hard.

"Success is born from hard work and staying power that comes with experience and education," Coombs advises. "We used our FFA experience to craft a vision for our life's work. This hit us at such an early age that we had a great advantage starting our businesses young. Out of our eight team members, six of them were FFA members. It can be an influential resume builder!"

— By Bev Flatt

### A FUTURE IN FLORICULTURE

Teachers, get lesson plans and classroom resources about floriculture in the Educator Resources section of [FFA.org](http://FFA.org). Members, visit [AgExplorer.com](http://AgExplorer.com) to see what careers interest you.

### **Economic Impact of the COVID-19 Virus**

Thousands of Americans have been impacted by the spread of the COVID-19 "Corona" Virus. Americans are being asked to stay at home, maintain a distance from others and be careful when in public places. Many businesses, like restaurants are having to limit operations to drive-thru and take-out options. Gyms and other businesses are closed altogether. With the sudden hit on profit, numerous businesses are faced with laying off employees, limiting service hours and other measures.

Businesses, jobs and families are all feeling the impact from the COVID-19 pandemic and the stalling economy.

**Type a 250 word response; write about the impact this pandemic has had on you, your family or your town.**  
**What has changed? (finances, school, hobbies/activities, jobs, etc..)**

*If you don't have computer access, you may write your response on a piece of paper!*



# COSMETOLOGY

## DISTANCE EDUCATION OVERVIEW

Distance Education: A formal instructional process in which the student and teacher are separated by physical distance and a variety of communication technologies are used to deliver instruction in theory to the student. Courses taught by distance education do not satisfy the requirements of the practical portion of the course curriculum.

Note: Distance Education hours are the only form of hours which can be completed without the presence of an instructor. If a student accrues hours by clock or credit, only the time system being used to account for distance education hours should be used to eliminate the possibility of duplicate credit for students.

## INSTRUCTIONS

Students will need to contact Ms. Aleshia Rivera-Palomino at [arivera@mpisd.net](mailto:arivera@mpisd.net) and provide a workable email. Once the email has been verified the student will be enrolled in the Distance Education Course and contacted through the email provided for further instructions.

Students will access their distance learning course either on a computer or a smart device. The first time they access or accept enrollment for the course needs to be on a computer.

# Culinary

ALL 4 LEVELS OF CULINARY ARTS

WEEK 1: March 30<sup>th</sup> 2020

Chef Anker: [kanker@mpisd.net](mailto:kanker@mpisd.net)

Mrs. Bradley: [mbradley@mpisd.net](mailto:mbradley@mpisd.net)

## Intro-- Mrs. Bradley's classes only

1. Students are to get onto Edmodo to complete their tasks. Join the Remind account if you have not already done so.

Edmodo	Remind (81010)
fvuwks	@66da7fa

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## Culinary Arts -- Chef Anker 2<sup>nd</sup>/3<sup>rd</sup> period only

Remind: 81010 text message: @hf3k6d

1. Do the Salad & Emulsions word search (some of them are backwards) then define the terms in the answer key on the back. (Last time we are covering this topic)

## Advanced Culinary Arts -- Chef Anker 7<sup>th</sup>/8<sup>th</sup> period only

Remind: 81010 text message: @823e42

1. We are moving on from the catering business plan and onto a full menu. First this first week make a list of items you would like on your menu (you'll create an actual menu later) Items need to complement each other and must have at least the following:  
3 Appetizers 3 Entrees 5 sides 3 desserts 5 beverages

-make only a list of your items with a short but appetizing description under each item.



## Practicum in Culinary Arts – Chef Anker 4<sup>th</sup>/5<sup>th</sup>/6<sup>th</sup> period only

Remind: 81010 text message: @39gghd

**ASIA:** It's bigger than you think! There are 50 countries within this biggest continent in the world.

1. Pick 1 country and write one page for each country that includes the topography (important to food supply) customs involving-service , food, & hospitality, type of safety & sanitation regulations, and lastly a recipe for something you would love to try or love to eat already. \*Remember that recipes include a Title, ingredients with quantities, & instructions.

A LITTLE SURPRISE IF YOU LOOKED AT THE 2<sup>ND</sup> PAGE.....Any of Chef Anker's Culinary and Practicum classes can get out of the writing part of the assignments by creating a recipe and sending a picture to the remind for their class.

If you don't use your cooking skills you start to lose them....and if you don't try your food I won't actually know it but I highly encourage you to taste as you go! Hope everyone is well! We miss you all!!

Name: \_\_\_\_\_

### 3 & 12 Letter Words

S T A B L E . E M U L S I O N  
 S Z W W O R E Z I T E P P A H  
 O G V I N A I G R E T T E Q O  
 J B P O H H Z V X I L S O O R  
 M M I E K A P R Y R I M T X S  
 R A X I V E J I U L Z O J F .  
 P Y P U A Z G E T X J Q Q E D  
 Y O P T J A F E Y R J G L S '  
 L E A R U Q P K N P H Q M J O  
 B W W Y J S I A E H N B D H U  
 D A L A S . N E E R G M T Y E  
 C O M P O S E D . S A L A D V  
 N Z C O F N M E H F S W S Q E  
 J F F E M U L S I O N G Z N R  
 L U W B G O O C G B S A U L S

APPETIZER                  EMULSION                  HORS D'OEUVERS          STABLE EMULSION  
 COMPOSED SALAD          GREEN SALAD          MAYO                          VINAIGRETTE

## Construction

### Construction Tech I and II

Go to website <http://safetytoolboxtopics.com/>

Read and go to categories and sections on this page.

### Practicum of Construction

Work on your 30 hour OSHA course



Mount Pleasant High School - CTE

Electrical Technology Packet

Instructor: Tim Davis

Email: [tdavis@mpisd.net](mailto:tdavis@mpisd.net)

Please email me if you should have any questions.

**Electrical Tech I**

- Practice drawing and labeling wiring diagrams
- Single pole switch to control a single light
- Single pole switch to control two light fixtures
- Three-way system to control a single light

**Electrical Tech II Dual Credit**

- Continue to use "Mike Holt" online format
- Check your NTCC email often
- Complete/submit all your test for Units 7 – 15. No due date yet. However, because this is Dual Credit – students will need to have completed all Units 1 – 15 by the end of NTCC Spring Semester

**Prac In Electrical Tech Dual Credit**

- Continue to use NTCC Black-board format.
- Check your NTCC email often
- Answer and submit chapter 5/6 review questions and online test



# Fashion Design

All classes need to check Edmodo and iCEV.

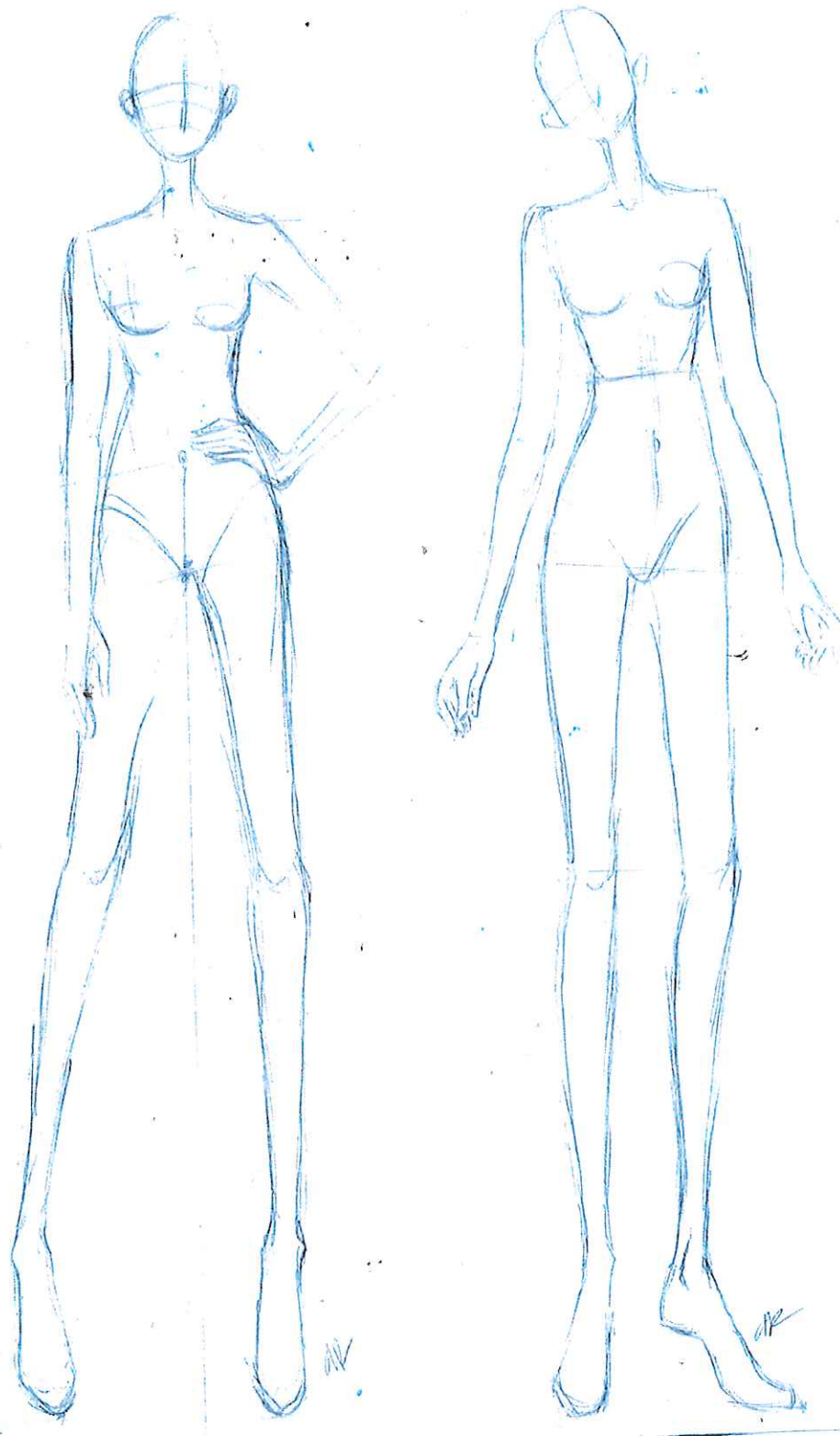
	Fashion Design 1	Fashion Design 2
Edmodo	q6b6h9	7wynn6
iCEV <a href="http://login.icevonline.com/register">http://login.icevonline.com/register</a>	MTPBRADL003	PILBRADL002
Remind (81010)	@agh347	@79k38h

*Only create a new account if you can't get a hold of me through Remind, Edmodo or email.*

There is also a croquis attached that you can use for sketching. I also have attached the Nick Verreos QR codes for how to draw a croquis for practice.

Basic Croquis	Fashion Croquis
	

Margaret Bradley  
Family and Consumer Sciences  
Mt. Pleasant High School, MPISD  
[mbradley@mpisd.net](mailto:mbradley@mpisd.net)



If this is a pen or pencil sketch, what colors, patterns, etc. would you use. Flip this over to draw and write your descriptions around the edge.



## FRESHMAN SKILLS ASSIGNMENTS

Mrs. Lockett (dlockett@mpisd.net)

Mrs. Fry (sfry@mpisd.net)

Coach Kenney (409-749-0336)

Coach Conley (dconley@mpisd.net)

### CAREER CLUSTER #9-----HOSPITALITY & TOURISM---week 1

**Definition:** this cluster helps people have a safe and good time when they are traveling or visiting new places. This cluster also helps with helping others explore the beauty, culture and cuisine of the world around us.

#### WHAT CLASSES CAN I TAKE IN HIGH SCHOOL TO HELP ME GET HERE:

Intro to Culinary Arts, Principals of Human Services

**CAREERS:** Travel Agent, Hotel Manager, Tour Operator, Baker, Flight Attendant and Event Coordinator (someone who plans weddings, baby showers, parties, etc)

#### ASSIGNMENT: ANSWER THE QUESTIONS BELOW:

These chains provide a service to the public. Can you name the businesses below?



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

## **All Health Science students (PHS, A&P, Practicum 1 & 2) except Health Science Theory**

Write a 200 word essay over how you are helping to prevent the spread of the Coronavirus and what activities you are participating in at home during this self-quarantine time. You can write it on paper and turn it in on Monday at the next homework pick up or type it and email it to your teacher.

### **MRS. AYERS – PHS & Medical Assisting**

Medical Assisting – along with the above assignment check your Remind for your CCMA exam practice assignment. You can message me on Remind (2/3 period @mrsaayer (no “s) or 4/5 period @ccma45) or email me at [aayers@mpisd.net](mailto:aayers@mpisd.net) if you have any questions. Stay safe! Mrs. Ayers

PHS – along with the above assignment, continue to work on your [careersafeonline.com](http://careersafeonline.com). Congratulations to all that have finished!

You can message me on Remind (PHS @phsmphs) or email me at [aayers@mpisd.net](mailto:aayers@mpisd.net) Stay safe! Mrs. Ayers

### **MRS. BUMPUS – Health Science Theory**

Write a 200 word essay over how the Coronavirus has affected or disrupted you and your family’s life and how are you coping with it.

### **Practicum 1:**

Please continue to study your EKG material on nhanow.com using your individual logins. Use the focused reviews from the previous two practice tests as well as the modules and notes you have taken. You may go ahead and access the next practice test ‘version C’ at home. I strongly encourage you to take notes as you go and write down the questions that you get wrong, or take screenshots, so that you can use that to study. I will be able to monitor your progress and scores on NHA. Please continue studying the EKG quizlet I made as well. Take care and be safe! Also, please, do the above assignment. -Mrs. McCall

### **Anatomy and Physiology:**

Please watch the attached video over crash course anatomy and physiology blood vessels- <https://www.youtube.com/watch?v=v43ej5lCeBo> . You may turn in your essay assignment at the top of the page to your classes Edmodo account or email your teacher. Houchin’s classes- [khouchin@mpisd.net](mailto:khouchin@mpisd.net)/ McCall’s class- [wmccall@mpisd.net](mailto:wmccall@mpisd.net).

### **Practicum 2-C.N.A.-**

Please work on your skills with your family. Also, for the written, go to [cnatutor.org](http://cnatutor.org), union test prep, and CNA plus for free websites to help you. Look at the questions you miss to learn why you missed it. If you have questions, please text or email me so that I may help you. Please let me know if you hear anything from the testing center regarding the rescheduling of your certification test.

# Human Growth and Development

Hey, Guys!

I am so glad we get to meet even if it is through the internet or phone calls. You are so capable of completing this assignment as it will only require you to fill in only five of the boxes. Just submit your responses online to [tsweeden@mpisd.net](mailto:tsweeden@mpisd.net) and have fun!

Finding these resources or learning opportunities should be easy and fun for you. Some are just questions or interviews of family members that can be done on the phone so do your best. I look forward to seeing and hearing your responses!

Love you guys a bunch and can't wait to see you again. BTW, Japan was amazing! I have a ton of pictures to show you!



## Quarantine Child Development Bingo

Time to talk a little about what we know about Child Development and put it into action. See if you can get five in a row during a week of staying quarantined.

1. Make a copy (File/Make A Copy)
2. Name your file: LAST NAME - Quarantine Child Dev Bingo
3. Insert a photo or description (**change the color of your text**) of what you did to complete the task in each of the squares. Five in a row hits a bingo!
4. Share it with me: [tsweedden@mpisd.net](mailto:tsweedden@mpisd.net)

C	H	I	L	D
Take a picture of you and your sibling playing together (toys, video games...)	Practice your reading skills - read a children's book	Come up with a craft that you could do with a preschooler at home	Find an exercise program for toddlers	Help someone else
Develop a routine that a family could use for a school aged kiddo during quarantine	Color a picture - is this a fine or gross motor skill?	Take a picture of you with your favorite toy/stuffed animal from when you were a kid	Take a nap! We all need our rest	Look up some tips and tricks for potty training
Check your email - and email someone to make their day brighter	Find an outfit for a preschooler to wear on a rainy, cold, and hot day	Free!	Find a toy that an infant might enjoy	Research one place you'd could take a toddler for a fun day out!
Make a picture collage of yourself expressing common emotions for infants (happy, angry, sad, & fear)	Build something - use blocks, legos, marshmallows and noodles, a fort...	Find two child care options in your community - compare and contrast them!	Take a virtual tour of a Labor & Delivery Unit of a hospital and create a packing list	Look up a career in the Child Care industry that you might enjoy
Make a flyer explaining what and how to prevent SIDS	Ask a parent, aunt/uncle, or grandparent something they did for fun as a child	Make a tik-tok about how to get a baby to sleep	Look up a recipe for how to make and store your own baby food	Play Hide-and-Go-Seek with someone

# LAW ENFORCEMENT

Principles of Law - Law Enforcement 1- Law Enforcement 2 - Forensic Science

## WEEK 1

### Principles of Law/Chamness:

**DIRECTIONS:**

Log onto iCEV Online – [www.icveonline.com](http://www.icveonline.com)

Review all PowerPoints and watch all videos pertaining to the topics listed below:

- 1) Criminal Justice Terminology
- 2) Civil Law Procedure

When complete, finish all activities and assessments found under the interactive tab.

### Law Enforcement 1/Chamness:

**DIRECTIONS:**

Log onto iCEV Online – [www.icveonline.com](http://www.icveonline.com)

Review all PowerPoints and watch all videos pertaining to the topics listed below:

- 1) Alcohol Laws
- 2) Arrest Procedure

When complete, finish all activities and assessments found under the interactive tab.

### Law Enforcement 2/Bailey:

**DIRECTIONS:**

Log into your MyEagle Portal on NTCC website - <https://ntcc.onelogin.com/>

\*Your log-in is your last name + the last 3 #'s of your social security, your password is your 8 digit birthday.

Example: ebailey108  
04121992

Explore your Blackboard account under the CRIJ 1307.042.043DC, paying attention to any TAB entitled CH 12. **Please email me for further instruction if needed!**

### Forensic Science/Parker:

**DIRECTIONS:**

Log onto Schoology - <https://www.schoology.com/>

Complete the assignment in the red folder for 3/24/2020. Check resources folder, if needed, for any additional resources to help you complete your assignment.

**INSTRUCTOR CONTACTS:**

Elizabeth Bailey: [ebailey@mpisd.net](mailto:ebailey@mpisd.net) - Law Enforcement 2

Ricky Chamness: [rhamness@mpisd.net](mailto:rhamness@mpisd.net) - (903) 285-1956 - Principles of Law, Law Enforcement 1

Sadonna Parker: [sparker@mpisd.net](mailto:sparker@mpisd.net) - Forensic Science

# Principles of Human Services

All students need to check Edmodo on a regular basis. Also join the class remind if you haven't done so already. I included the class code if you need to create an account.

*Only create a new account if you can't get a hold of me through Remind, Edmodo or email.*

Edmodo	Remind (81010)
atq9nj	@ac8fa2

Margaret Bradley  
Family and Consumer Sciences  
Mt. Pleasant High School, MPISD  
[mbradley@mpisd.net](mailto:mbradley@mpisd.net)



# STEM

Principles of Engineering | Engineering Design I & II | Practicum in Engineering | Manufacturing Engineering | Practicum in Manufacturing | Programming I

Week of March 30<sup>th</sup> | Assignments are listed by class | Emails: [dmccarley@mpisd.net](mailto:dmccarley@mpisd.net) | [jjones@mpisd.net](mailto:jjones@mpisd.net)

## **Principles of Engineering**

These terms appear throughout the SOLIDWORKS software and documentation. Please be familiar with them.

Origin - Appears as two blue arrows and represents the (0,0,0) coordinate of the model. When a sketch is active, a sketch origin appears in red and represents the (0,0,0) coordinate of the sketch. You can add dimensions and relations to a model origin, but not to a sketch origin.

Plane - Flat construction geometry. You can use planes for adding a 2D sketch, section view of a model, or a neutral plane in a draft feature, for example.

Axis - Straight line used to create model geometry, features, or patterns. You can create an axis in different ways, including intersecting two planes. The SOLIDWORKS application creates temporary axes implicitly for every conical or cylindrical face in a model.

Face - Boundaries that help define the shape of a model or a surface. A face is a selectable area (planar or nonplanar) of a model or surface. For example, a rectangular solid has six faces.

Edge - Location where two or more faces intersect and are joined together. You can select edges for sketching and dimensioning, for example.

Vertex - Point at which two or more lines or edges intersect. You can select vertices for sketching and dimensioning, for example.

## **Engineering Design I**

Email me if you want to download SolidWorks. A good way to spend some time is perusing [www.instructables.com](http://www.instructables.com).

Another good way to spend some time is learning to code on [www.code.org](http://www.code.org). Send me an email and I can help you get set up. [jjones@mpisd.net](mailto:jjones@mpisd.net)

We have time to put in orders for the future, whatever that may be, so those of you who will be in the class next year need to be thinking about projects that you would like to do. Email me your ideas in the following format:

Topic:

Source of inspiration: please put a website if you saw it on one

Why: convince me that this is a good use of our time

## **Engineering Design II & Practicum in Engineering**

Email me if you want to download SolidWorks. A good way to spend some time is perusing [www.instructables.com](http://www.instructables.com).

Another good way to spend some time is learning to code on [www.code.org](http://www.code.org). Send me an email and I can help you get set up. [jjones@mpisd.net](mailto:jjones@mpisd.net)

We have time to put in orders for the future, whatever that may be, so those of you who will be in the class next year need to be thinking about projects that you would like to do. Email me your ideas in the following format:

Topic:

Source of inspiration: please put a website if you saw it on one

Why: convince me that this is a good use of our time

## **Manufacturing Engineering & Practicum in Manufacturing**

Please log on to [www.learnamatrol.com](http://www.learnamatrol.com) and continue your lessons and tests. I will be watching and will reset your tests when needed. Send me an email if you have any questions. [jjones@mpisd.net](mailto:jjones@mpisd.net)

## **Programming I**

Please log on to [www.code.org](http://www.code.org) and continue your lessons. Send me an email if you have any questions. [jjones@mpisd.net](mailto:jjones@mpisd.net)



# Sports Medicine 1

3/11/2020

## CHAPTER 14

### INJURIES TO THE HIP AND PELVIS

## ANATOMY REVIEW

**PRIMARY HIP STRUCTURES**

- INNOMINATE BONES
  - ILIUM
  - ISCHIUM
  - PUBIS
- FEMUR

**SECONDARY HIP STRUCTURES**

- SACRUM
- COCCYX

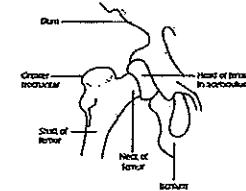


FIGURE 14.1 The ball-and-socket structure of the hip joint (posterior view).

## ANATOMY REVIEW

**FUNCTIONS OF THE PELVIS INCLUDE:**

- ATTACHMENT OF LOWER EXTREMITIES.
- PROTECTION OF INTERNAL ORGANS.
- MUSCLE ATTACHMENTS.
- BIRTH PROCESS, IN FEMALES.

**JOINTS**

- FEMOROACETABULAR (HIP JOINT)
- SACROILIAC
- PUBIC SYMPHYSIS

## NERVOUS SYSTEM

**MAJOR NERVES**

- FEMORAL
- SCIATIC
- OBTURATOR (NOT SHOWN)
- SAPHENOUS
- TIBIAL
- PERONEAL
- PLANTAR NERVES (NOT SHOWN)
- DIGITAL NERVES

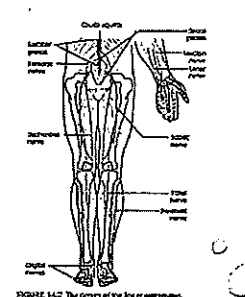


FIGURE 14.2 The courses of the lower extremities.

## CIRCULATORY SYSTEM

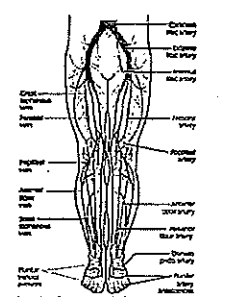


FIGURE 14.3 The blood vessels of the lower extremities.

**MAJOR BLOOD VESSELS**

- EXTERNAL ILIAC
- FEMORAL
- DEEP PROFUNDA FEMORAL (NOT SHOWN)
- SAPHENOUS VEIN
- POPLITEAL
- ANTERIOR TIBIAL
- POSTERIOR TIBIAL
- DORSALIS PEDIS
- PLANTAR

## MUSCULATURE

**POSTERIOR MUSCLES**

- GLUTEALS – MAXIMUS, MEDIUS, MINIMUS
- DEEP EXTERNAL ROTATORS – PIRIFORMIS, GEMELLI, OBTURATORS, QUADRATUS FEMORIS
- HAMSTRINGS – BICEPS FEMORIS, SEMITENDINOSUS, SEMIMEMBRANOSUS

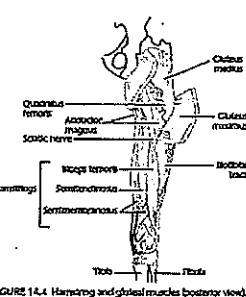


FIGURE 14.4 Hamstring and gluteal muscles (posterior view).

### MUSCULATURE

#### ANTERIOR MUSCLES

- PSOAS MAJOR & MINOR
- ILIACUS
- PECTINEUS
- ADDUCTORS – MAGNUS, LONGUS, BREVIS
- GRACILIS

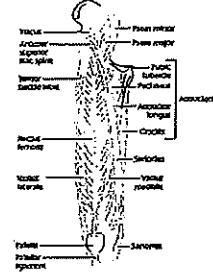


FIGURE 14.5 Clavicle traps trapezius (Anterior view).

### MUSCULATURE

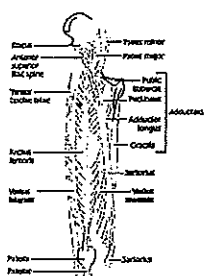


FIGURE 14.3 Clavicle traps trapezius (Anterior view).

#### ANTERIOR MUSCLES

- GRACILIS
- TENSOR FASCIA LATAE
  - TENDONOUS ILIOTIBIAL BAND
- QUADRICEPS – RECTUS FEMORIS, VASTUS MUSCLES (MEDIALIS, LATERALIS, INTERMEDIUS)

### COMMON SPORTS INJURIES

- SPORTS-RELATED INJURIES TO THE SKELETAL STRUCTURES (FRACTURES AND DISLOCATIONS) OF THE HIP AND PELVIS ARE NOT COMMON.
- INJURIES TO THE SOFT TISSUES IN THE REGION ARE MORE COMMON AND CAN BE QUITE DEBILITATING TO THE ATHLETE.
  - SPORTS-RELATED INJURIES TO THIS AREA COMMONLY INVOLVE COLLISION SPORTS OR FORCEFUL MOVEMENTS.
  - HOWEVER, OVERUSE INJURIES ARE COMMON ESPECIALLY IN ENDURANCE ATHLETES.

### FRACTURES OF THE PELVIS

- PELVIC FRACTURES ARE NOT COMMON IN SPORTS, BECAUSE IT TYPICALLY TAKES A GREAT DEAL OF FORCE TO FRACTURE THE PELVIS.
  - PELVIC FRACTURES ARE DEVASTATING INJURIES.
  - PELVIC FRACTURES IN THE ADOLESCENT CAN BE SERIOUS BECAUSE OF OPEN GROWTH PLATE.
- THIS INJURY MAY OCCUR IN SPORTS SUCH AS HOCKEY, POLE-VAULT, OR FOOTBALL.
- NO ATHLETE SHOULD RETURN TO PLAY AFTER A SUSPECTED PELVIC FRACTURE UNTIL BEING CLEARED BY A PHYSICIAN.

### FRACTURES OF THE PELVIS

#### SIGNS AND SYMPTOMS

- ABNORMAL PAIN, SWELLING, USUALLY ACCOMPANIED WITH VISUAL OR PALPABLE DEFORMITY IN PELVIC REGION.
- PAIN ELICITED WHEN ILIAC CRESTS ARE PRESSED TOGETHER.
- INJURY TO INTERNAL ORGAN(S) MAY BE ASSOCIATED WITH THIS INJURY.

#### FIRST AID

- TREAT FOR SHOCK AND INTERNAL BLEEDING, MONITOR VITAL SIGNS.
- ARRANGE FOR TRANSPORTATION TO A MEDICAL FACILITY ON A SPINE BOARD, ELEVATED AT THE FEET.

### OTHER FRACTURES

#### FEMORAL NECK STRESS FRACTURE

- COMMONLY OCCURS IN AMENORRHEIC ATHLETES INVOLVED IN ENDURANCE SPORTS.
- ATHLETE COMPLAINS OF SEVERE ANTERIOR THIGH OR GROIN PAIN AND EXPERIENCES PAIN WHEN WALKING.
- THIS PROBLEM CAN ALSO BE A PARTIAL RESULT OF POOR FOOTWEAR, HARD RUNNING SURFACE, TOO MUCH TRAINING, OR HIP DEFORMITIES.
- REFERRAL TO PHYSICIAN AND 6-8 WEEKS REST IS RECOMMENDED.

## OTHER FRACTURES

### SLIPPED CAPITAL FEMORAL EPIPHYSIS

- HEAD OF FEMUR AVULSES FROM SHAFT AT GROWTH PLATE.
- COMMONLY OCCURS IN PREPUBESCENT BOYS, PARTICULARLY TALL BOYS WHO EXPERIENCED RECENT GROWTH SPURTS, OVERWEIGHT BOYS, AND LATE-MATURING BOYS.
- EXHIBIT A FLEXED HIP, LACK OF HIP MOTION, AND PAIN IN THE ANTERIOR GROIN, HIP, THIGH, OR KNEE.

## HIP POINTER

- HIP POINTER IS A COMMON INJURY, INVOLVING A CONTUSION TO THE ANTERIOR/SUPERIOR PORTION OF THE ILIAC CREST.
- ALTHOUGH EXTREMELY PAINFUL AND DEBILITATING, IT DOES NOT REQUIRE IMMEDIATE MEDICAL ATTENTION.
- SIGNS AND SYMPTOMS INCLUDE SWELLING, PAIN, AND DISCOLORATION AT INJURY SITE.
- ATHLETE MAY WALK WITH SLIGHT LIMP. COUGHING, SNEEZING, AND LAUGHING MAY ALSO PRODUCE PAIN AT THE SITE OF INJURY.

## HIP POINTER

### FIRST AID

- APPLY ICE IMMEDIATELY.
- ATHLETE SHOULD REST AND AVOID ACTIVITIES INVOLVING LOWER EXTREMITIES.
- IN SEVERE CASES, CRUTCHES MAY BE NECESSARY.
- PERMIT LIMITED PARTICIPATION WITHIN 1 TO 2 WEEKS.
- PAD FOR PROTECTION UPON RETURN TO SPORT.

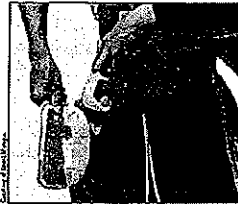


FIGURE 12.5 An athlete treats a hip-pointer pad.

## LABRAL TEARS

- RESULTS FROM TRAUMA, REPETITIVE EXCESSIVE HIP MOTIONS (SOCCER, HOCKEY, DANCE), AND/OR FEMOROACETABULAR IMPINGEMENT (FAI).
- ATHLETES GENERALLY COMPLAIN OF ANTERIOR HIP OR GROIN PAIN, AND SOME MAY INDICATE BUTTOCK OR LEG PAIN.

## FEMOROACETABULAR IMPINGEMENT

- FAI IS A RESULT OF THE FEMORAL HEAD NOT BEING CONGRUENT WITH THE ACETABULUM.
- SIGNS AND SYMPTOMS INCLUDE GENERALIZED ANTEROLATERAL HIP PAIN EITHER UNILATERALLY OR BILATERALLY (DEPENDING ON THE ACTIVITY), SHARP PAIN WHEN TURNING (ESPECIALLY TOWARD THE AFFECTED SIDE), PAIN FROM PROLONGED SITTING OR RISING FROM A SITTING POSITION, AND ENTERING OR EXITING A CAR.

## TROCHANTERIC BURSITIS

- "SNAPPING HIP SYNDROME"
  - A RESULT OF EITHER ACUTE TRAUMA TO THE SPECIFIC AREA OR REPEATED MICROTRAUMA TO THE TENDON ATTACHMENTS WITH SECONDARY INFLAMMATION OF THE BURSAE IN THE AREA.
  - ILIOTIBIAL BAND, TENSOR FASCIA LATA, AND THE GLUTEUS MEDIUS OFTEN CAUSE.
- IT IS A PROBLEM SEEN MOST OFTEN IN MIDDLE-AGED PEOPLE, ESPECIALLY RUNNERS.
- STRETCHING, ICE, ANTI-INFLAMMATORIES, AND REST ARE FIRST LINE OF TREATMENT.

### OSTEITIS PUBIS

- THIS INJURY RESULTS FROM CONSTANT STRESS AND POSSIBLY SOME DEGENERATION IN THE PUBIC SYMPHYSIS JOINT.
  - CAN BE DIFFICULT TO DIAGNOSE BECAUSE OF ALL THE MUSCLES IN THE AREA AND OTHER MORE COMMON INJURIES.
- LONG DISTANCE RUNNERS, BASKETBALL PLAYERS, AND SOCCER PLAYERS ARE VULNERABLE.
  - REPETITIVE SHEARING FORCES THROUGH PELVIS CAUSE INFLAMMATION AND DYSFUNCTION.

### OSTEITIS PUBIS

**SIGNS AND SYMPTOMS**

- DISCOMFORT IN THE ANTERIOR PUBIC, SUPRAPUBIC, OR HIP AREAS.
  - MALE ATHLETES MAY HAVE TESTICULAR OR SCROTAL PAIN.

**FIRST AID**

- CHRONIC INJURY NEEDS REFERRAL TO A PHYSICIAN.
- CONDITION OFTEN RESPONDS WELL TO REST, ICE, AND OVER-THE-COUNTER ANTI-INFLAMMATORY MEDICATIONS.
- IT MAY TAKE 3 MONTHS TO A YEAR TO RECOVER.

### CHRONIC HIP AILMENTS

- SACROILIAC (SI) JOINT CAN BECOME COMPLETELY IMMOBILE INFLAMED FROM AN INJURY OR OTHER PROBLEMS.
  - REQUIRES SPECIFIC MOVEMENT TECHNIQUES TO RESET.
- "SNAPPING HIP" THAT DOESN'T RESOLVE WITH CONSERVATIVE TREATMENT AND/OR PAIN DEEP IN HIP JOINT SHOULD BE EXAMINED BY A PHYSICIAN.
  - RULE OUT MICROFRACTURES, HIP DEFORMITIES, AND LABRAL TEARS TO FEMOROACETABULAR JOINT (HIP JOINT).
  - THESE WILL BE ADDRESSED CONSERVATIVELY BUT MAY NEED SURGICAL INTERVENTION.

### HIP DISLOCATION

- THIS SERIOUS INJURY IS RARE IN ATHLETICS, BUT IT MAY OCCUR IN CONTACT/COLLISION SPORTS.
- INJURY CAN OCCUR FROM A VIOLENT COLLISION SUCH AS SEEN IN TACKLE FOOTBALL OR ICE HOCKEY.
- TYPICAL MECHANISM OF INJURY IS FALLING ON A FLEXED KNEE AND HIP CAUSING FORCE THROUGH FEMUR AND POSTERIOR DISLOCATION.

### HIP DISLOCATION

**SIGNS AND SYMPTOMS**

- PAIN AND LOSS OF MOVEMENT IN AFFECTED LEG.
- HIP IS FLEXED AND KNEE OF THE INVOLVED LEG IS ANGLED TOWARD THE OPPOSITE LEG.
- SWELLING THAT IS PALPABLE.

**FIRST AID**

- TREAT FOR SHOCK.
- IMMOBILIZE THE ATHLETE AND CONTACT EMS.
- MONITOR BLOOD FLOW TO THE LOWER LEG AT ALL TIMES.

### AVULSION FRACTURES OF THE HIP

- IN AN AVULSION FRACTURE, A BONE FRAGMENT IS TORN AWAY WITH TENDON ATTACHED.
  - AVULSION FRACTURES OF THE HIP ARE UNCOMMON BUT CAN OCCUR—THE ISCHIAL TUBEROSITY, ILIAC CREST, AND PUBIS ARE LIKELY SITES OF THIS INJURY.
  - INJURY LIKELY TO OCCUR WHILE SPRINTING, LANDING, OR JUMPING.



## AVULSION FRACTURES OF THE HIP

**SIGNS AND SYMPTOMS**

- SNAPPING OR POPPING SENSATION UPON INJURY.
- PAIN AND SWELLING AT SITE OF INJURY.
  - POINT TENDERNESS AND BRUISING OVER INJURY.
- INABILITY TO USE THE MUSCLE GROUP INVOLVED DUE TO AVULSION.

**FIRST AID**

- IMMEDIATELY APPLY ICE AND LIMIT ATHLETE'S MOVEMENTS. CRUTCHES MAY BE NECESSARY.
- REFER TO A PHYSICIAN FOR EVALUATION.

## INJURIES TO MALE GENITALIA

- THESE INJURIES ARE USUALLY TRANSIENT IN NATURE.
  - SCROTAL TRAUMA CAN CAUSE TESTICULAR CONTUSION.
- MEDICAL EMERGENCY
  - SEVERE TRAUMA CAN RUPTURE TESTICLE
  - SEVERE TRAUMA CAN CAUSE TESTICULAR TORSION.
    - BLOOD SUPPLY IS COMPROMISED TO OR FROM THE AREA, CAUSING SWELLING TO OCCUR IN THE SCROTUM.
- WEARING A PROTECTIVE CUP IS ADVISED IN COLLISION/CONTACT SPORTS.

## TESTICULAR OR SCROTAL CONTUSIONS

**SIGNS AND SYMPTOMS**

- EXTREME PAIN & POINT TENDERNESS.
- ASSUMING FETAL POSITION AND GRASPING TESTICLES.
- ATHLETE'S REPORT OF A BLOW TO THE TESTICLES.

**FIRST AID**

- APPLY ICE, AND ALLOW ATHLETE TO REST LYING DOWN.
- TRANSPORT TO MEDICAL CARE FACILITY IN CASES OF EXCESSIVE SWELLING OR LASTING PAIN.

## HERNIAS

A PROTRUSION OF VISCERA THROUGH ABDOMINAL WALL

- INGUINAL HERNIA IS MORE COMMON IN MALES
- FEMORAL HERNIA IS MORE COMMON IN FEMALES.
- ATHLETE SHOULD SEEK THE ADVICE OF A PHYSICIAN REGARDING SURGICAL OPTIONS.
- IN A SPORTS HERNIA, THE POSTERIOR INGUINAL WALL IS WEAKENED WITHOUT PROTRUSION OF ABDOMINAL CONTENTS. NO PALPABLE HERNIA IS DETECTED, BUT ATHLETE COMPLAINS OF PAIN IN GROIN AND LOWER ABDOMINAL AREAS.

## SPORT HERNIAS

- COMMON IN KICKING AND EXPLOSIVE SPORTS.
- DEEP GROIN PAIN THAT DOES NOT HAVE A SPECIFIC ONSET AND GRADUALLY GETS WORSE AS THE DAYS PASS.
- SPORTS HERNIA MAY BE ONE PIECE OF A MORE COMPLEX SYNDROME SOMETIMES REFERRED TO AS "GROIN DISRUPTION INJURY".
- RARELY HEALS WITHOUT SURGICAL INTERVENTION.

## NERVE PROBLEMS

- A COMMON COMPLAINT IS BURNING OR TINGLING SENSATION RADIATING FROM THE HIP TO BUTTOCKS AREA AND GOING DOWN THE LEG.
- THIS DISCOMFORT OFTEN RESULTS FROM SCIATIC NERVE IRRITATION.

**TREATMENT**

- CONTINUING TO PARTICIPATE IN THE ACTIVITY AGGRAVATES THE IRRITATION.
- REFER ATHLETE TO A PHYSICIAN.
- REST, STRETCHING, AND STRENGTHENING EXERCISES MAY BE HELPFUL.

## PREVENTION

- MANY HIP INJURIES CAN BE PREVENTED THROUGH PROPER CONDITIONING AND STRENGTHENING OF THE ASSOCIATED MUSCULATURE.
- REST IS ALSO IMPORTANT FOR THE BODY TO REPAIR MICRO DAMAGES INCURRED BY THE STRESSES OF TRAINING.
- PROTECTIVE EQUIPMENT AND PROPER FOOTWEAR MAY ALSO HELP TO PREVENT INJURIES FROM OCCURRING.

## REVIEW QUESTIONS

1. WHAT TYPE OF JOINT IS THE HIP JOINT?
2. NAME THE BONES THAT MAKE UP THE HIP JOINT.
3. EXPLAIN THE ACTIONS OF THE GLUTEAL MUSCLES.
4. OUTLINE THE LOCATION OF THE MUSCLES THAT CAUSE FLEXION, EXTENSION, ADDUCTION, AND ABDUCTION OF THE HIP.
5. LIST THE BONES IN THE HIP AREA THAT ARE SUSCEPTIBLE TO FRACTURE.
6. WHAT STRUCTURES ARE INJURED WHEN AN ATHLETE SUFFERS A HIP POINTER?

## REVIEW QUESTIONS (CONT.)

7. LIST THE SYMPTOMS OF OSTEITIS PUBIS.
8. EXPLAIN THE DIFFERENCE BETWEEN TESTICULAR CONTUSION AND TESTICULAR TORSION.
9. DEFINE HERNIA AND OUTLINE WHAT A COACH SHOULD DO IF ONE IS SUSPECTED.
10. WHAT SHOULD BE DONE IF AN ATHLETE IS EXPERIENCING PAIN RADIATING DOWN THE BACK OF THE LEG?