

APPLIED HUMAN ANATOMY W/ LAB

APK 2100C ~ 04 CREDITS ~ SPRING 2022 ~ LIVE SECTION

INSTRUCTOR: Joslyn Ahlgren, Ph.D. (she/her/hers)

Office: FLG 108 Office Phone: 352-294-1728

Email: jahlgren@ufl.edu

Currently enrolled students: please use CANVAS email

PERSONAL NOTE FROM DOC. A: If you are totally overwhelmed by the stresses of your semester and feel like you just can't handle the pressure, please reach out to me—I'd like to help.

Also, it is important to me that you feel welcome and safe in this class; and that you are comfortable communicating with me, your TA, and your classmates. If your preferred name is not what shows on the official UF roll, please let me know. I would like to acknowledge the name and pronouns that reflect your identity. You may also change your "Display Name" in Canvas. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, log in, and click on the profile icon at the top right. Select "View & Update Profile Information" and click "Edit" for the Name option. Uncheck "Use my legal name" and update how you wish your name to be displayed as Chosen Name. Click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

Finally, Anatomy is all about the human body. That includes things like skin/hair/eye color/genital, differences and similarities from one individual to the next, and even myths about body parts. I am committed to using this course content to help students become comfortable, competent, and caring when discussing controversial issues related to the body and dismantling systems which put some students at a greater disadvantage than others. These attributes can help us all advocate for ourselves and others. If you have ideas for me along these lines or feel uncomfortable at any point, please reach out to me—I'd love to hear your perspectives and have a conversation.

OFFICE HOURS: This semester, my office hours for this class will be held via zoom (virtual office hours, VOHs). A schedule, tips for how to best use office hours, and zoom links will be posted in CANVAS. Zoom VOHs are recorded and posted for those who are not able to attend at the provided times. If you are unable to attend VOHs, please feel free to post questions to the discussion boards in canvas, post questions to the class group me, email your instructor questions that they can answer during recorded VOHs, and/or visit the UGTAs in the Help Center.

LECTURE TIME/LOCATION: MWF Period 4 (10:40-11:30am EST) / CSE A101

Recordings are not available to this LIVE section of the course, so students will need to attend lectures and take notes in class. Your course instructor promises to make it worth your time.

LAB TIME/LOCATION: There is no lab during the first week of classes. Please see the table below for specific lab meeting times and locations for each section. TA contact information for each section will be posted in CANVAS.

CLASS#	SECTION #	LAB DAY AND MEETING TIME (EST)	LAB ROOM
10610	8582	T Period 6 - 7 (12:50 PM - 2:45 PM)	FLG 107A
10606	1289	M Period 6 - 7 (12:50 PM - 2:45 PM)	FLG 107A
10607	4700	T Period 8 - 9 (3:00 PM - 4:55 PM)	FLG 107A
10608	4703	M Period 8 - 9 (3:00 PM - 4:55 PM)	FLG 107A
10609	4705	R Period 8 - 9 (3:00 PM - 4:55 PM)	FLG 107A
10597	0538	R Period 2 - 3 (8:30 AM - 10:25 AM)	FLG 107A
10604	1257	M Period 2 - 3 (8:30 AM - 10:25 AM)	FLG 107A
10603	1248	W Period 6 - 7 (12:50 PM - 2:45 PM)	FLG 107A

COURSE DESCRIPTION: Study of general anatomy of the human body from a systematic approach. Understanding anatomical terminology, gross structures, and locations of different body structures are primary concerns. Cells, tissues, and organs of the integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive systems are emphasized.

PREREQUISITE KNOWLEDGE AND SKILLS: There are no prerequisites for this course; however, any previous experiences in medical terminology, physiology, physics, chemistry, and/or biology will be helpful to students.

REQUIRED AND RECOMMENDED MATERIALS: Please note that APK2100c will be participating in the UF All Access program this semester. Students will have two options to gain access to the required MasteringA&P materials when classes begin. Students will have a choice to "Opt-In" to MasteringA&P access through a link provided in CANVAS for a reduced price and pay for these materials through their student account. Students who do not choose this option will be able to purchase an access code through the UF Bookstore. Both options provide access to the same online materials. There will

also be a discounted, loose-leaf version print version of the textbook available at the UF Bookstore for students who would like a physical text for the course.

Textbook: Human Anatomy by Marieb, Wilhelm, Mallatt, 9th edition. Pearson.

COURSE FORMAT: For **LECTURE**, students will physically attend a one-period class three days each week. For **LABS**, students will physically attend a two-period class once per week. Students will additionally have access to the Anatomy Help Center (FLG 107) for practicing with the anatomical models at times outside of their scheduled lab section. Students should read required textbook pages and print out or download PDF slides posted in CANVAS <u>before</u> attending lecture and lab.

PURPOSE OF COURSE: The purpose of this course is to introduce students to anatomy (the study of the body's structures) and to present information and engage students in a way that promotes critical and creative thinking within the context of health and movement studies. Students will be asked to not only identify important structures of the human body, but also to incorporate some of the functions of the structures and tissues so that the information can be applied to novel, clinical scenarios. This applied method of teaching anatomy is intended to enhance the long-term retention of the concepts covered and prepare students for future courses and experiences which may require health or movement-based communication and problem solving.

GENERAL EDUCATION SUBJECT AREA GOALS: Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments. *The course purpose explains how these objectives will be met.*

COURSE LEARNING OBJECTIVES: The following table describes the UF General Education student learning outcomes (SLOs) and the specific learning objectives for APK 2100c. By the end of this course, students should be able to:

GEN ED SLOS	APK 2100C COURSE GOALS	ASSESSMENT METHODS
Content: Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.	 Identify and describe gross and microscopic structures of the organ systems covered. Describe the relationship between structure and function at all levels of organization (cellular, tissue, organ, system, organism). 	 Homework problems All lecture exams Lab exams 1 & 2

Communication: Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.	Communicate with peers and professionals using anatomical terminology.	Oral communication assessment using anatomical models
Critical Thinking: Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.	 Predict functions of unknown body structures if given the anatomical make-up or vice-versa (predict anatomical make-up of body structures if given clues about function). Predict potential causes of disease/injury symptoms from a functional anatomy perspective. 	 Clinical scenario homework problems All lecture exams Lab Exam 1

COURSE AND UNIVERSITY POLICIES:

LAB ATTENDANCE POLICY: Attend the lab section for which you are enrolled. There are 12 lab meetings this semester. Students who attend 8 or more of their lab meetings will earn 3 of their 15 possible points of extra credit. Attending a different TAs section will not count toward these 8 meetings, so if you have to miss your lab for any reason, please make arrangements with your Lab TA to attend another lab section that week—preferably another one of their sections. If you cannot make it to one of their sections, that is fine, you may attend someone else's...but it will not count toward your extra credit attendance tally.

PERSONAL CONDUCT POLICY: Students are expected to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus
- Be in your seat and prepared at the start of the lab meeting time or for exams
- Use of professional, courteous standards for all emails and discussions
- Reserve cell phones or other technology for course-related uses only
- Chat with peers before and after lab rather than during presentations
- Adherence to the UF Student Honor Code: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
 - Honor code violations of any kind will not be tolerated
 - Any use, access, or handling of resources or technology during an exam will result in a zero on the exam <u>and</u> further sanctions determined by UF
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation and processing

MAKE-UP POLICY: To schedule a make-up exam or assignment extension, please fill out the make-up request form posted in CANVAS (orientation module) and submit it to your course instructor via CANVAS email. Documentation will be required. Make-ups will not be granted for personal travel/vacations. Additionally, many students will encounter having multiple exams in one day. Only if another exam is scheduled for the same time/overlaps with this course's exams will a request be considered. Should a student miss an exam due to an unexcused reason (e.g., overslept, mixed up the exam time, etc.), the exam can be taken with a 20% penalty if taken within 24 hours of the original exam time or with a 40% penalty if taken within 48 hours of the original time.

A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an illness, family emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment (https://care.dso.ufl.edu/instructor-notifications/). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO.

Requirements for class attendance and make-ups, assignments, and other work are consistent with the university policies that can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

USABILITY, DISABILITY AND DESIGN: I am committed to creating a course that is inclusive in its design. If you encounter barriers, please let me know immediately so that we can determine if there is a design adjustment that can be made or if an accommodation might be needed to overcome the limitations of the design. I am always happy to consider creative solutions as long as they do not compromise the intent of the assessment or learning activity. You are also welcome to contact the Disability Resource Center's Getting Started page at https://disability.ufl.edu/students/get-started/ to begin this conversation or to establish accommodations for this or other courses. I welcome feedback that will assist me in improving the usability and experience for all students. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

RECORDING POLICY: Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments

(quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

COURSE EVALUATIONS: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

GETTING HELP:

HEALTH AND WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/ On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY (IDEA) RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Joslyn Ahlgren, APK IDEA Liaison and Undergrad Coordinator, jahlgren@ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu

GRADING:

The following table outlines the point-accruing components of this course. The total points earned from each component will be summed and divided by the total points possible in the class. Any changes to this due to mid-semester interruptions will be posted as an announcement in CANVAS.

EVALUATION COMPONENTS	POINTS PER	APPROXIMATE % OF
(NUMBER OF EACH)	COMPONENT	TOTAL GRADE
Lecture Exams (4)	60 pts each = 240 pts	240/700 = 34.5%
Homework (20)	10 pts each = 200 pts	200/700 = 28.5%
Lab Exams (2)	100 pts each = 200 pts	200/700 = 28.5%
Communication Assessment (1)	10 pts each = 10 pts	10/700 = 1.5%
Comprehensive Final (1)	50 pts each = 50 pts	50/700 = 7%
Extra Credit	15 points possible	0%

LECTURE EXAMS – Each exam will consist of 40 questions, 1.5 points per question, and formats including multiple choice and true/false. Exams will take place in the lecture room during a regularly scheduled class period (see schedule below). Students are not permitted access to any kind of materials during exams. Questions are generated by the course instructor and the majority of focus should be given to the lecture notes and chapter learning objectives when studying. Students will be allowed 50 minutes to take these mid-term exams. Sample exam questions will be available in CANVAS.

HOMEWORK – Homework in MasteringA&P will be due Fridays at 11:59pm EST each week. Homework problems are multiple choice, true/false, fill in the blank, multiple answer, and matching. These questions are specific to the textbook, so that should be the primary resource for answering those questions. However, these are open-resource assignments, so students are encouraged to work on these question sets with peers. These assignments are NOT intended to be used as the primary study tool for preparing for exams. The function of the homework assignments is to (a) get students more familiar with the textbook, and (b) to get students eased into answering anatomy questions. The following are specific homework grading guidelines to keep in mind:

- You may open/close an assignment as many times as you wish until it is due.
- For the fill in the blank questions, spelling and proper tense of the word counts.

- For multiple choice and fill-in-the-blank questions, you are penalized 50% if you miss on the first attempt and 100% if you miss on the second attempt.
- For true/false questions, you are penalized 100% if you miss on the first attempt.
- You are penalized a small fraction for opening a hint if one is available.
- Late submissions will be penalized 25% per day.

LAB EXAMS — Lab exams will consist of 80 multiple choice questions, 1.25pts per question. These exams are practical "bell-ringer" exams in which the student moves from station to station identifying gross anatomical structures on plastic models. These exams consist of 40 stations, 2 questions per station, and students have 40 minutes to complete the exam. Students can sign up for their lab exam times in the Anatomy Help Center. DRC-registered students will email the course instructor to sign up for lab exam days/times. Students who do not arrive to the lab exam on time (i.e., 10 minutes early) for their exam will need to wait outside the lab for the next exam time. If there is not room in the next exam time, the student will need to continue waiting until an opening is available. If there are no more exams, then the student will have to take a written make up exam.

COMMUNICATION ASSESSMENT – Students will be assessed on their ability to effectively communicate using anatomical terminology. Students will select any lab model and orally describe the model and answer basic questions about it. A grading rubric for this assessment will be posted in CANVAS and should be used to prepare. Please work with your Lab TA to schedule and complete this assessment. Failure to complete this on or before the last day of classes (before the reading days) will result in a zero.

COMPREHENSIVE FINAL – The final exam will consist of 80 multiple-choice and true-false questions, each worth 0.625 pts. You will be allowed two hours to complete this exam. The exam will be held in the lecture room. A guide will be posted in CANVAS to assist you in studying for this exam. Students are encouraged to wait until after the last midterm to focus on this study guide.

EXTRA CREDIT - Students can earn up to 15 points of extra credit in this course through their Lab TA. Each Lab TA will assign extra credit differently, so it is the students' responsibility to learn their TA's policies for earning these points. 3 points can be earned from simply attending 8 lab meetings (your own section or in case of make ups, your TAs sections only). Up to 5 of the 15 points of extra credit can be earned for participating as a subject in an approved research study. Approved studies will be posted in CANVAS throughout the semester. Participation in a research study is NOT necessary to earn the maximum amount of extra credit—as all TAs will offer 18 points worth of extra credit opportunities. Participation in a research study CANNOT earn you more than 15 points of extra credit. If you do participate in a study, the study coordinator will give your name and extra credit points to your instructor at the end of the semester. All extra credit points will be uploaded to the gradebook prior the final

exam. Any discrepancies must be brought to the attention of <u>your Lab TA</u> before 5pm on the last reading day.

GRADING SCALE: Any discrepancies with the gradebook should be pointed out to the instructor immediately. There is no curve for this course and final grades will not be rounded up. More detailed information regarding current UF grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

Minus grades are not assigned for this course. A minimum grade of C is required for all General Education courses, such as this one. Should points need to be altered during the term (not likely, but things like hurricanes and pandemics can really muck things up), these <u>percentages</u> will still be used to calculate grades (i.e., 90% = A).

LETTER	POINTS NEEDED TO EARN	% OF TOTAL POINTS FOR	GPA IMPACT OF EACH
GRADE	EACH LETTER GRADE	EACH LETTER GRADE	LETTER GRADE
Α	≥ 630	90.00-100%	4.0
B+	609-629.99	87.00-89.99%	3.33
В	560-608.99	80.00-86.99%	3.0
C+	539-559.99	77.00-79.99%	2.33
С	490-538.99	70.00-76.99%	2.0
D+	469-489.99	67.00-69.99%	1.33
D	420-468.99	60.00-66.99%	1.0
E	≤ 419.99	0-59.99%	0

WEEKLY COURSE SCHEDULE:

The following table represents current plans for the term. Any changes to this plan will be posted in CANVAS as an announcement.

Watch the instructor welcome, read the syllabus, and take the syllabus quiz before coming to class on day one. Earning a 100% on the syllabus quiz will give you access to all course contents (lecture and lab slides, sample test questions, etc.).

Homework for each textbook chapter is due each Friday at 11:59pm EST. You must register for MasteringA&P (instructions posted in CANVAS) to access the homework.

WEEK	DATES	BOOK CHAPTER - LECTURE TOPIC (READING PGS)	LAB
Jan 05 – Jan 07	No class on Monday of this week Ch.1 – Intro to the Body (1-9, 11-13) – DAY ONE	No Lab – Drop/Add Week Use this week to locate your lab and	
		Ch. 2 – Cells (22-35)	get slides printed out/downloaded.

2	Jan 10 – Jan 14	Ch. 4 – Tissues (64-95)	Lab 1 - Axial Skelton (Textbook Ch. 7- no need to read)
3	Jan 17 – Jan 21	Mon, Jan 17 – Holiday - No Lecture/Lab Ch. 4 continued Ch. 5 – Integumentary (103-116)	Lab 2 - Appendicular Skeleton (Textbook Ch. 8 – no need to read) Monday labs attend a diff section.
4	Jan 24 – Jan 28	Lecture Exam 1 – Wed, 10:40am EST, CSE A101 Ch. 6 – Skeletal (123-141)	Bones Continued
5	Jan 31 – Feb 04	Ch. 9 – Articulations (208-221 and the specific joints covered in lecture) Ch. 10 – Muscular (241-254)	Lab 3 - Muscles: Upper Body
6	Feb 07 – Feb 11	Ch. 10 – Muscular continued Ch. 11 – Muscles (262-266, 270-273)	Lab 4 - Muscles: Lower Body
7	Feb 14 – Feb 18	Ch. 11 – Muscles continued Lecture Exam 2 – Wed, 10:40am EST, CSE A101	Review and Practice Practical
8	Feb 21 – Feb 25	Ch. 12 – Intro to Nervous (349-364) Ch. 13 – CNS (374-377, 401-412, Optional: 378-400, 413-419)	Lab Exam 1 Mon Feb 21 and Tues Feb 22
9	Feb 28 – Mar 04	Ch. 13 – CNS continued Ch. 14 – PNS (427-428, 432-446, 459-460)	Lab 5 - Articulations, Skin, Eyes/Ears
10	Mar 07 – Mar 11	Spring break	No lab
11	Mar 14 – Mar 18	Ch. 14 continued Ch. 15 – ANS (467-476, 480) Lecture Exam 3 – Friday, 10:40am EST, CSE A101	Lab 6 - Nervous System
12	Mar 21 – Mar 25	Ch. 19 – Heart (562-574, 577-580) Ch. 20 – Vessels (588-597, 616hepatic portal)	Lab 7 – Circulatory System
13	Mar 28 – Apr 01	Ch. 20 – Vessels continued Ch. 22 – Respiratory (645-663)	Labs 8 & 9 – Respiratory & Digestive Systems
14	Apr 04 – Apr 08	Ch. 23 - Digestive (675-711) Ch. 24 - Urinary (720-736)	Labs 9 & 10 – Digestive & Urinary/Reproductive
15	Apr 11 – Apr 15	Ch. 24 continued Lecture Exam 4 – Fri, 10:40am EST, CSE A101	Review and Practice Practical
16	Apr 18 – Apr 22	Ch. 25 – Reproductive (this chapter on final only) Thurs-Fri, Dec 9-10 – Reading Days – No Lecture/Lab	Lab Exam 2 Mon Apr 18 and Tues Apr 19

Comprehensive Final Exam – Thursday, April 28, 3-5pm EST – CSE A101

SUCCESS AND STUDY TIPS:

STUDY TIPS:

- Read from the text BEFORE attending the lectures. Do not take notes, underline, highlight, or attempt to memorize anything...JUST READ and enjoy!
- Snowball your notes. Begin studying lecture material immediately after the first lecture. Then, after the second lecture, begin your studies with day one lecture material. Continue this all the way up to the exam.
- If there is something in the textbook that was NOT in lectures, you are not expected to know it. There is a lot in the text that we don't have time to cover.
- Google novel images. For example, if there is a picture of the brainstem in your notes, Google "brainstem images" and see if you can identify the structures from the lecture.
- Google diseases. For example, if we are studying bone tissue, Google "bone disease". Click on any link and just read a paragraph to see if you can understand based on what you now know about bone tissue anatomy. If you don't understand it, that's okay...did you recognize any words?
- Study with others! This does not mean review ppt slides together...you can do that on your own. When you study with others, do something more productive, like working on the sample test questions, googling things to discuss, or even creating practice exam questions for yourselves.
- Study from the Learning Objectives for each chapter. It is highly recommended that as you study (especially with others), you follow along with the learning objectives. Many students share google docs and split up the work to make comprehensive study guides.
- On the sample test questions, make sure you understand the correct answer, but also determine why the alternate options were selected. Where they similar in structure, similar types of tissue composition, similar regional location??

SUCCESS TIPS:

- Stay on top of your schedule. This course moves at a FAST pace...and you can easily get overwhelmed if you procrastinate. Complete the homework as you go and study for the exam on a daily basis.
- Stay organized. Keep track of all important due dates and move through each day
 in a uniform manner so that you are always aware of what you have done and
 what is left to be completed.
- Utilize the Undergraduate Teaching Assistants (UGTAs). These students have earned an A in my course recently and can help you with both lecture and lab.
- Set up canvas notifications so that you read all announcements.
- Avoid Smokin' Notes...seriously...don't get me started on how bad these are for LEARNING. Take your own notes...swap notes with friends in class for comparison...but for goodness sake, don't spend money on notes for this class.
- Have a positive attitude! THIS STUFF IS COOL!