



**PHPS 752  
BIOCHEMISTRY II  
CRN 12886**

**Spring 2020**

**Course Coordinators**

**Ghee Tan, Ph.D.**

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## **Section 1: Course Information**

**Course Title:** Biochemistry II

**Course Alpha-Numeric:** PHPS 752

**CRN:** 12886

**Credits:** 3 credits

### **Class Time and Location:**

<u>Room</u>	<u>Day</u>	<u>Time</u>
*Lecture Hall A	Tuesdays	10:00 am – 10:50 am; 11:00 am – 11.50 am

\*Hale Kiho'ihoi

Supplemental section Class Time and Location:

<u>Room</u>	<u>Day</u>	<u>Time</u>
Mod D Compounding lab	Wednesdays	3:00 – 3:50 pm; 4:00 – 4:50 pm

### **Prerequisites:**

Students in the DKICP Ph.D. in Pharmaceutical Sciences Program may enroll in this course. Additional pre-requisites include: Organic Chemistry

### **Course Description:**

Biochemistry - Metabolism will delve into metabolism and the interrelationships of metabolic processes. The biochemistry of metabolism focuses on glycolysis, the tricarboxylic acid cycle, gluconeogenesis, and the synthesis and breakdown of biomolecules (carbohydrates, lipids, and amino acids). Metabolic control and regulation of pathways will be examined. Clinical correlates and metabolic diseases will be examined, with a substantial emphasis on metabolic syndrome. A sampling of biochemical techniques will also be described.

### **Course Structure:**

Lectures & presentations

### **Course Learning Objectives for **Main Section:****

At the completion of this course, the student should be able to:

1. Describe the bioenergetics of intermediary metabolism in terms of the spontaneity and direction of metabolic reactions.
2. Describe the ways carbohydrates and lipids are digested, absorbed and metabolized to release energy in a biologically useful form.
3. Describe the electron transport chain and oxidative phosphorylation and how energy is generated, used, and stored by various organs of the body.
4. Identify the key enzymes in each pathway that are regulated.
5. Describe metabolic regulation and the mechanism of control of individual metabolic pathways with respect to hormonal signals, and physiological stimulators and inhibitors.
6. Identify and state the effects of exogenous molecules (e.g., drugs or toxins) on key regulatory enzymes of various metabolic pathways.
7. Describe the various aspects of metabolic pathways, that when altered, will lead to disease.
8. List the main clinical features of disease states associated with defects in each metabolic pathway.
9. Describe the disposal of nitrogen, and amino acid degradation and biosynthesis.
10. Describe the metabolic alterations that underlie Diabetes mellitus Types I and II.

### **Course Learning Objectives for Supplemental Topics:**

1. Define the metabolic and vascular abnormalities that underlie insulin resistance, type 2 diabetes mellitus (T2DM), and cardiovascular disease.
2. Review the history of the concept of metabolic syndrome and outline the current debate.
3. State the central criteria of the various definitions of the metabolic syndrome and the differences among them.
4. Discuss the predictive power of risk factors typically included in definitions of metabolic syndrome.
5. Describe the pathogenesis and consequences of metabolic syndrome.
6. Describe the mechanism of  $\beta$ -cell dysfunction in T2DM.
7. Define insulin resistance, and outline its role in cardiovascular disease and T2DM.
8. Review the molecular and cellular basis for insulin resistance.
9. Describe the role of inflammation in insulin resistance, atherosclerosis and T2DM.
10. Describe the role of intestinal incretin hormones, and the effects of the incretin, glucagon-like peptide-1 (GLP-1), on insulin and glucagon secretion.
11. Review the treatments for T2DM based on the biological actions of GLP-1 agonists and inhibitors of dipeptidyl peptidase-4 (DPP-4).
12. Describe the effect of the adipose tissue-derived hormones (e.g., adiponectin and leptin) on glucose metabolism and insulin resistance.

13. Describe the role of peroxisome proliferator-activated receptor (PPAR) in metabolic syndrome and T2DM.
14. Define the role of PPAR agonists in the treatment of insulin resistance.
15. Advanced topics in Metabolic Syndrome (TBD).

### **Attendance Policy:**

Students are expected to devote their entire efforts to the academic curriculum. This includes 100% attendance and active engagement both didactic and experiential coursework.

### **Instructor Information:**

#### **Instructor for Main Section:**

Instructor: Ghee Tan, Ph.D.  
Office: Pharmaceutical Research Building, Room 108  
Ph: (808)-732-7145  
E-mail: [gheetan@hawaii.edu](mailto:gheetan@hawaii.edu)

#### **Instructor for Supplemental Section:**

Dana-Lynn T. Koomoa-Lange, Ph.D.  
Office: Modular Building D, Room 103  
E-mail: [danalynn@hawaii.edu](mailto:danalynn@hawaii.edu)

### **Textbook and Course Materials for Main Section:**

Recommended course textbook:  
Lippincott Illustrated Reviews: Biochemistry (7th edition)  
Author: Denise R. Ferrier  
ISBN/ISSN 9781496344496  
Publication Date, January 6, 2017

## **Section 2: Course Assessment**

### **Assessment Schedule:**

Final grades will be based on:  
a) 3 exams for the **MAIN** part of the course (160 points) and,  
b) 3 exams for the **SUPPLEMENTAL** section (150 points) and 3 presentations (pass/fail)

**IMPORTANT:** The **MAIN** and **SUPPLEMENTAL** portions of the course are weighted approximately equally even though they are not based on an identical number of credit hours.

### **Total Course Points:**

Please note: Exam points and total course points may be subject to change at the discretion of the course coordinators/instructors.

**a) The point distribution for the 3 MAIN exams is as follows:**

<u>Method</u>	<u>Date</u>	<u>Start Time</u>	<u>Duration</u>	<u>Location</u>	<u>Points</u>
Exam 1	Mar 2	9:00 am – 10.50 am	110 min	*Lecture Hall A	60
Exam 2	April 20	9:00 am - 10:50 am	110 min	*Lecture Hall A	60
Final	May 13	1:00 pm - 3:00 pm	120 min	*Lecture Hall A	40

\*Hale Kiho‘iho‘i

The **MAIN exams** will be 1 hour and 50 minutes in duration. Final grades will be based on 3 exams for a total of 160 points (100%). Exams will consist of “Multiple Choice” questions. Each lecture will be represented by approximately 5 questions on each exam.

**b) The point distribution for SUPPLEMENTAL exams and presentations is as follows:**

<b>Item</b>	<b>Essay questions</b>	<b>Points</b>
Suppl. Exam 1*	5	50
Suppl. Exam 2*	5	50
Suppl. Exam 3*	5	50
*Presentation 1		P/F
*Presentation 2		P/F
*Presentation 3		P/F
Total points		150

\*Please note days and times for Supplemental Exams in “Section 3: Course Schedule”, “**Supplemental Lectures**” below.

**In addition, students will be required to fulfill the following:**

\*Present in class the findings of a relevant topic related to metabolic syndrome in recent literature (no older than 2000). Topics must be approved by Dr. Koomoa-Lange. Presentations 1-3 will be 35-40 minutes in duration, followed by discussion, during which the student is expected to address questions from fellow students and instructor(s) comprising the audience. The dates that the presentations are given will depend on the topics chosen, and the manner in which they fit into the lecture schedule. Students must receive a pass grade for these presentations in order to pass the course. Students must pass all Supplemental exams in order to pass the course.

### Grade Scale:

A	90-100
B	80-89
C	70-79
F	<70

### Passing this Course:

Students receiving a letter grade of B or higher will pass this course.

### Exceptions/Excuses from Required Course Activities:

Students may be excepted from mandatory course activities (e.g. exams) and provided an opportunity to reschedule a make-up activity for unforeseen issues such as documented medical emergencies, illness, or death in the immediate family. Other reasons may be allowable in extenuating circumstances. For consideration of other reasons, students must contact the course coordinator at least two weeks prior to the scheduled course activity. The decision to allow or not allow the rescheduling of a mandatory event shall be the decision of the Director of the Ph.D. in Pharmaceutical Sciences Program. The course coordinator shall inform the student of the outcome at least one week prior to the scheduled course activity.

### Section 3: Course Schedule

#### MAIN LECTURES\*

Tuesdays, 10:00 am – 10:50 am; 11:00 am – 11.50 am in Lecture Hall A, Hale Kihō'ihō'i.

**\* The course coordinator reserves the right to make alterations to the course schedule as needed.**

Week	Lecture	Date	Topics*
1	1,2	14-Jan	Bioenergetics
2	3,4	21-Jan	Electron Transport Chain
3	5,6	28-Jan	Electron Transport Chain
4	7,8	4-Feb	Oxidative Phosphorylation
5	9,10	11-Feb	Glycolysis
6	11,12	18-Feb	Glycolysis
7	13,14	25-Feb	TCA cycle
		<b>2-Mar (9:00 - 10:50 am)</b>	<b>EXAM 1 (12 lectures) (covers lecture material from 14-Jan to 18-Feb)</b>
8	15,16	3-Mar	Gluconeogenesis

9	17,18	10-Mar	Gluconeogenesis
	--	<b>16-Mar to 20-Mar</b>	<b>SPRING BREAK</b>
10	19,20	24-Mar	Glycogen Metabolism
11	21,22	31-Mar	Fructose Metabolism
12	23,24	7-Apr	Pentose Phosphate Pathway
13	25,26	14-Apr	Cholesterol and steroid metabolism
		<b>20-Apr (9:00 - 10:50 am)</b>	<b>EXAM 2 (12 lectures) (covers lecture material from 25-Feb to 7-Apr)</b>
14	27,28	21-Apr	Lipid Metabolism
15	29,30	28-Apr	Fatty acid and triacylglyceride metabolism
16	31,32	5-May	Metabolic changes in diabetes
	-	<b>13-May (1:00 – 3:00 pm)</b>	<b>FINAL EXAM (8 lectures) (covers lecture material from 14-Apr to 5-May)</b>

\*Lippincott Illustrated Reviews: Biochemistry (7th edition), Denise R. Ferrier

### SUPPLEMENTAL LECTURES

Wednesdays, 3:00 – 3:50 pm; 4:00 – 4:50 pm in Modular Bldg D, compounding laboratory.

Jan. 15	Introduction to course - course structure & grading
	Assign presentations
Jan. 22	Basic cell physiology
	Pancreatic beta cell physiology
Jan. 29	Pancreatic beta cell dysfunction - T2D
	Beta cell pharmacology - drugs to treat T2D
Feb. 5	Metabolic Syndrome
	Criteria for Metabolic Syndrome & T2D
Feb. 12	Signaling pathways that regulate T2D
	Signaling pathways that regulate T2D
Feb. 19	Molecular basis for insulin resistance
Feb. 26	Define metabolic and vascular abnormalities associated with insulin resistance and T2D
Mar. 4	Discussion and Review
<b>Mar. 11</b>	<b>Exam 1</b>
Mar. 18	Spring Break

Mar. 25	Immune system, inflammation in insulin resistance, atherosclerosis and T2D
	Signaling pathways regulating inflammation in insulin resistance, atherosclerosis and T2D
Apr. 1	Immune system, inflammation in insulin resistance, atherosclerosis and T2D
	Immune system, inflammation in insulin resistance, atherosclerosis and T2D
<b>Apr. 8</b>	<b>Exam 2</b>
Apr. 15	Role of intestinal incretin hormone on glucose metabolism and insulin resistance
	Tole of adiponectin an dleptin on glucose metabolism and insulin resistance
Apr. 22	Targeting signaling pathways (e.g. PPAR) in the treatment of insulin resistance
<b>Apr. 29</b>	<b>Exam 3</b>

## **Section 4: Course Policies**

### **DKICP Academic Policies**

**Electronic devices:** Students are prohibited from using electronic devices such as computers, tablets, or cell phones during class for personal communication (e.g. texting) or internet browsing or for any activities that are not directly related to the course. Failure to comply with this policy may result in the student being asked to leave class for that session.

**Academic Honesty:** Academic honesty and integrity are expected of all students throughout their course of study at DKICP. Any violation of this code is considered to be a serious academic violation and may result in a reprimand, monetary fine, written warning, academic and/or disciplinary probation, suspension, or dismissal. Academic dishonesty constitutes a breach of academic integrity that violates the academic foundation of an institution and compromises the integrity and well-being of the educational program. The policies on students' academic and professional responsibilities are included in the Graduate Student Handbook.

### **Professionalism Policies:**

- Make-up exams (due to illness, family emergency, or approved extenuating circumstances) will generally only be given if the instructor is notified prior to the examination. Failure to take an exam will count as a zero on that exam.
- Missing Exams Documentation will be required for all missed exams.
- Requests for re-grading exam questions may result in the entire exam being re-graded, for all students. Point total errors can be corrected without re-grading the entire exam.
- Attendance at workshop/case sessions is mandatory. Missed workshops will result in no points for that session. Possible make-up assignments will be assigned for missed workshop(s) with instructor discretion.

**Cell Phones, Pagers & Other Communication Devices:** All cell phones, pagers etc. are to be on silent mode during class or turned off! Cell phones and pagers are NOT to be answered during class time. Students are not permitted to engage in any electronic communication during class time, unless approved by the lecturer. Students who do engage in unapproved electronic communication during class time will be asked to leave.

**Dress Code:** On campus, the mode of dress is determined by each student's professional judgment, unless a course has a required dress code. Clothing having caricatures, messages, symbols, etc., that can be construed based on societal norms to be vulgar, offensive or to contribute to creating a hostile learning/academic environment is considered to be unacceptable attire and demonstrates inappropriate professional judgment that is subject to review and action by the course coordinator.

**Attendance Policy:** University of Hawai'i at Hilo encourages 100% attendance by students at all course-related sessions, lectures, laboratories, and clinical assignments. Each college or department has the prerogative to establish its own attendance requirements and policies. Unless a department's policy differs, class attendance is mandatory for all students for the first session of each course in each quarter as well as on the first day of class after scheduled vacations and University holidays. If illness, a personal emergency, personal incapacitation, or other exceptional problem of a serious nature causes a student to be absent from a session requiring mandatory attendance, the student must immediately notify the course coordinator and follow stated course policies and procedures. Unexcused absences during these or other mandatory attendance sessions may result in course failure.

## **DKICP Exam Policy (Electronic Exams)**

The DKICP Exam Policy intends to promote academic integrity by delineating a well-defined, clearly articulated, fair process for administering exams. Students who do not adhere to the exam policy will be subject to academic disciplinary action and will be formally referred to the Director of the Ph.D. in Pharmaceutical Sciences Program.

**PRIOR TO THE EXAM DAY:** It is the student's responsibility to:

- download the most up-to-date version of Exemplify
  - download the relevant exam by the deadline set by the course coordinator
  - contact DKICP IT department if s/he is unable to complete the above steps by the designated time
- The instructor will post the exam and distribute the download code no later than one week before the exam seating.

**ON THE EXAM DAY:** Students must bring a laptop computer (that is compliant with the DKICP technical specifications and has a fully charged battery) with the latest version of Exemplify installed, a power cord, their personal wireless login username and password, Exemplify username (UHH ID number) and login.

Students should disable the sleep/hibernate mode on your computer before the exam. Some computers go into sleep/hibernate mode during extended periods of nonuse. During an exam, it can be difficult to exit this mode. Refer to the instructions for your operating system to modify these settings.

**ARRIVE ON TIME:** Students are expected to arrive on-time for all exams. Students who arrive more than 5 minutes late for an exam will NOT be allowed to enter. (Emergency situations will be taken into consideration on a case by case basis; documented proof of the emergency may be required). Late arrival is unprofessional and disturbs the concentration of other students.

**DISPLAY DKICP STUDENT PHOTO ID CARD:** Students must display their student ID card with their photo and name readily visible at all times during the exam.

**PLACE ALL BELONGINGS IN THE FRONT OR REAR STORAGE AREA OF THE CLASSROOM:** Students must place all of their belongings in the storage area of the classroom before they sit for the exam.

**CELL PHONES, WATCHES and ELECTRONIC DEVICES OTHER THAN A LAPTOP COMPUTER** MUST be removed from clothing/pockets, turned off and placed in the front or rear storage area of the classroom. Disruption of an exam due to an electronic device may be subject to academic disciplinary action.

**NO HATS, HOODIES or SUNGLASSES:** Students are not allowed to wear any attire covering their head or eyes, including hats, hoodies or sunglasses.

**SIT SEPARATED:** When space allows students are required to sit with at least one empty chair between themselves and students to either side.

**DESKS MUST BE KEPT CLEAR:** Students are allowed to have a laptop computer, mouse, power cord, pencil, scratch paper if provided by the instructor (students must write their name at the top of the scratch paper and turn it in when they leave the exam), and DKICP student photo ID card on their desks. No other items will be allowed on the desk or around the desks of students during exams.

**STUDENTS LAPTOPS MUST REMAIN CLOSED UNTIL THE PROCTOR GIVES INSTRUCTIONS TO OPEN THEM.**

**NO FOOD OR BEVERAGES:** Food and/or beverages are NOT allowed during an exam.

**CALCULATORS:** If a calculator is required for the exam, only non-programmable calculators will be allowed.

**EXAM PASSWORD DISTRIBUTION:** Once everyone is seated and has opened Exemplify, the proctor will show the exam password on the screen. At this point everyone enters the password and begins at the same time. Computer speeds vary but every student will be given the allotted time to complete the exam.

**NO TALKING or OTHER COMMUNICATION ALLOWED BETWEEN STUDENTS DURING EXAMS:** Any talking, disruption or suspicious behavior will be documented by proctors, reviewed by the course coordinator and Director of Ph.D. in Pharmaceutical Sciences Program and subject to academic disciplinary action.

**EXACT TIME LIMITS:** All exams are set with a pre-determined time limit by the course coordinator. At the end of each exam period, Exemplify will end the exam.

**\*\*Students who complete their exam early are allowed to upload their exams (see below) and leave quietly.**

**UPLOADING THE EXAM:** When students have completed the exam, they will follow the on-screen instructions to upload their answer file. Students must ensure that their answer file has been uploaded before they leave the classroom. Once students reach the confirmation of upload screen they should alert a proctor who will record their submission time. Both students and the course coordinator will receive an email verifying that their answer file was uploaded. Students should check they have received this email before they leave the exam. Students should not open any other files or programs on their computer before leaving.

In the event of a technical problem, the instructor determines whether students can leave before uploading is complete. The instructor can then set another upload deadline and students can upload the encrypted exam file from home.

**NO TOILET OR PERSONAL BREAKS DURING EXAMS:** Students are advised to attend to ALL personal needs before entering the exam room. Once seated, leaving the room for any reason constitutes the end of the exam. In the case of an emergency, students may request permission to leave the exam room by asking the proctor. Any emergency request to leave the room will be documented and reviewed by the course coordinator and Director of Ph.D. in Pharmaceutical Sciences Program.

**TECHNICAL ASSISTANCE:** Students may request technical help at any time during the exam period by raising their hands.

**EXAMS MAY BE VIDEO TAPED WITHOUT NOTICE:** DKICP reserves the right to video tape any exam at any time without notice.

## **DKICP Exam Policy (Paper Exams)**

The DKICP Exam Policy intends to promote academic integrity by delineating a well-defined, clearly articulated, fair process for administering exams in the College. Students who do not adhere to the exam policy will be subject to academic disciplinary action and will be formally referred to the Director of the Ph.D. in Pharmaceutical Sciences Program.

**ARRIVE ON TIME:** Students are expected to arrive on-time for all exams. Students who arrive more than 5 minutes late for an exam will NOT be allowed to enter. (Emergency situations will be taken into consideration on a case-by-case basis; documented proof of the emergency may be required). Late arrival is unprofessional and disturbs the concentration of other students.

**DISPLAY DKICP STUDENT PHOTO ID CARD:** Students must display their student ID card with their photo and name readily visible at all times during the exam.

**PLACE ALL BELONGINGS IN THE FRONT OR REAR STORAGE AREA OF THE CLASSROOM:** Students must place all of their belongings in the storage area of the classroom before they sit for the exam.

**CELL PHONES, WATCHES and ALL OTHER ELECTRONIC DEVICES:** These items MUST be removed from clothing/pockets, turned off and placed in the front or rear storage area of the classroom. Disruption of an exam due to an electronic device may be subject to academic disciplinary action.

**NO HATS, HOODIES or SUNGLASSES:** Students are not allowed to wear any attire covering their head or eyes, including hats, hoodies, or sunglasses.

**SIT SEPARATED:** When space allows, students are required to sit with at least one empty chair between themselves and students to either side.

**DESKS MUST BE KEPT CLEAR:** Students are allowed to have two number 2 pencils, one eraser and their DKICP student photo ID card on their desks. No other items will be allowed on the desk or around the desks of students during exams.

**NO FOOD OR BEVERAGES:** Food and/or beverages are NOT allowed during an exam.

**CALCULATORS:** If a calculator is required for the exam, only non-programmable calculators will be allowed.

**EXAM DISTRIBUTION:** Once everyone is seated, exams will be distributed face down. Exams must remain face down and untouched by the students until the moment the proctor calls “start”. At this point, everyone may turnover their exam and begin at the same time.

**NO TALKING or OTHER COMMUNICATION ALLOWED BETWEEN STUDENTS DURING EXAMS:** Any talking, disruption or suspicious behavior will be documented by proctors, reviewed by the course coordinator and Director of Ph.D. in Pharmaceutical Sciences Program, and subject to academic disciplinary action.

## **Section 5. Student Support**

### **UH Hilo Title IX Policy**

The University of Hawaii is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. If you or someone you know is experiencing any of these, the University has staff and resources on your campus to support and assist you. Staff can also direct you to resources that are in the community. Here are some of your options:

If you wish to remain **ANONYMOUS**, speak with someone **CONFIDENTIALLY**, or would like to receive information and support in a **CONFIDENTIAL** setting, contact:

- UH Hilo Counseling Services: SSC, Room E-203. 808-932-7465.
- UH Hilo Medical Services: Campus Center, Room 212. 808-932-7369
- Hawaii Island YWCA: 808-935-0677

If you wish to **REPORT** an incident of sex discrimination or gender-based violence including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence or stalking as well as receive information and support\*, contact:

- Jennifer Stotter, Director of the Office of Equal Opportunity & Title IX Coordinator:  
808-932-7641 [jstotter@hawaii.edu](mailto:jstotter@hawaii.edu)
- Kalei Rapoza, Director of Human Resources:  
808-932-7626 [kaleihii@hawaii.edu](mailto:kaleihii@hawaii.edu)

\* Please note that you do not have to file a report with the University to receive institutional support or assistance.

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to: <http://www.hawaii.edu/titleix>

### **Students with Disabilities**

Any student with a documented disability who would like to request for accommodations should contact the Disability Services Office: 932-7623 (Voice), or 932-7002 (TTY), [uds@hawaii.edu](mailto:uds@hawaii.edu) Student Services Center, Room E-230, as early in the semester as possible.

## **Mental Health/ Suicide Prevention**

The UH Hilo community is committed to and cares about all students. Life in graduate school can get complicated. Students sometimes feel overwhelmed, lost, experience anxiety or depression, struggle with relationship difficulties, family responsibilities, or diminished self-esteem. However, supportive services are available and effective. UH Hilo Counseling Services helps students cope with difficult emotions and life stressors. Counseling Services is staffed by experienced, professional counselors, who are attuned to the diverse needs of all types of college students. The services are FREE and completely confidential.

Find out more at <https://hilo.hawaii.edu/studentaffairs/counseling> or by calling (808) 932-7465

For immediate help, contact:

The Crisis Line of Hawaii: 1-800-753-6879

National Suicide Prevention Hotline: 1-800-273-8255 ([www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)) or text “Aloha” or “Hello” to the Crisis Text Line: 741-741

## **UH Hilo CARE Team**

The UH Hilo Care Team is a multi-disciplinary team who receives referrals about students whose behavior raises significant concerns and reasonably suggests that the behavior, physical and/or emotional state:

- Presents safety issues for the student or others; or
- May hinder the student’s ability to meet expected standards of conduct or achieve academic requirements; or
- May be evidence of severe emotional distress

You may make a referral to the Care Team by completing the [online reporting form](#) or by contacting K. Kainoa “Kainoa” Ariola-Sukisaki, Care Team Coordinator: (808) 932-7445

## **Campus Security**

If there is an imminent threat of danger or an emergency please contact Campus Security: (808) 974-7911