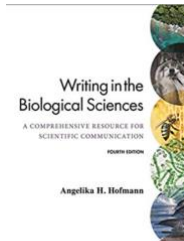


**G Protein-coupled Receptor Biology**  
**PSYCH308**  
**BIOL 4319 CRN:15990**  
**BIOL 5319 CRN:15989**

G protein-coupled receptor biology is an opportunity to read and discuss scientific literature in the field of GPCR biology. As 40-50% of all drugs in the market today are targeted toward GPCRs, it is important for students to have a clear understanding of the function and relevance of these proteins to signaling, health and biology.

**TEXT FOR THE COURSE**

***Writing in the Biological Sciences***/Fourth Edition/ Angelika Hofmann



**UNDERGRADUATES**


- 3 Midterms 50%- Exam 3 is optional. If you choose to take exam 3 you do not need to take the final.
- Attendance, **RESEARCH** (not reviews) Paper Presentations and quiz scores (25% of grade)
- Final due December 8th (25% of grade) by 5PM. Final is for students who do not take exam 3.

**PHD OR MS GRADUATE STUDENTS**

- 3-Midterms 50%- Exam 3 is optional. If you choose to take exam 3 you do not need to take the final.
- **RESEARCH** (not reviews) Paper topic selections & background/scores (20% of grade) Start on 18<sup>th</sup> of October
- Final due December 1<sup>st</sup> – F31 (10% of grade) (<https://www.niaid.nih.gov/grants-contracts/three-new-f31-sample-applications> )-
- Written final due December 2<sup>nd</sup> (20% of grade) by 5PM.- Final is for students who do not take exam 3.

**All writing assignments are due on time. Late submissions will not be accepted.**

<b>DATE (SUBJECT TO CHANGE)</b>	<b>READING ASSIGNMENT</b>
August 23-25, 2022	GPCR Scitable ( <a href="https://www.nature.com/scitable/topicpage/gpcr-14047471/">https://www.nature.com/scitable/topicpage/gpcr-14047471/</a> )

	<b><u>The mechanism for ligand activation of the GPCR–G protein complex</u></b> Amirhossein Mafia, Soo-Kyung Kim and William A. Goddard III 2022
August 30-Sept 8, 2022	<b><u>Opportunities and Challenges for In Silico Drug Discovery at Delta Opioid Receptors</u></b> Yazan J. Meqbil 1 and Richard M. van Rijn 2,3,* 2022 <b><u>Five Decades of Research on Opioid Peptides: Current Knowledge and Unanswered Questions</u></b> Lloyd D. Fricker, Elyssa B. Margolis, Ivone Gomes and Lakshmi A. Devi 2020
September 13,2022	<b><u>Detailed insight on <math>\beta</math>-adrenoceptors as therapeutic targets</u></b> Bharath KumarVelmurugan Rathinasamy Baskaran· Chih-YangHuang
September 15, 2022	<b><u>Rhodopsins: An Excitingly Versatile Protein Species for Research, Development and Creative Engineering</u></b> Willem J. DeGrip and Srividya Ganapathy 2022
September 20, 2022 <b>September 22, 2022 ONLINE</b>	<b><u>Genetic variation across the human olfactory receptor repertoire alters odor perception</u></b> C. Trimmer, A. Keller , N. R. Murphy , L. L. Snyder , J. R. Willer , M. H. Nagai, N. Katsanis , L. B. Vosshall, H. Matsunami and J. D. Mainland
<b>September 29, 2022</b>	<b>Midterm posted #1-- 09/22/2022 Due at 11:59pm NO CLASS TODAY - EXAM IS DUE</b>
October 4-6, 2022	<b><u>International Union of Basic and Clinical Pharmacology. XCIV. Adhesion G Protein–Coupled Receptors</u></b> 2015 Hamann et al
October 11-13, 2022	<b><u>The Multi-Functional Roles of CCR7 in Human Immunology and as a Promising Therapeutic Target for Cancer Therapeutics</u></b> <a href="#">Faris Alrumaihi*</a>
October 18, 2022	Topic= Chemokine Receptors and Pain – One of the papers that we will discuss: <b>Nociception-Dependent CCL21 Induces Dorsal Root Ganglia Axonal Growth via CCR7-ERK Activation. 2022</b>
October 20, 2022	Michael Brissette topic
October 25, 2022	Sylvia Ward topic
October 27, 2022	Laurencia Almeida topic
<b>October 28, 2022</b>	<b>The drop date is October 28, 2022.</b>
November 1, 2022	Stephanie Gutierrez topic
<b>November 3, 2022</b>	<b>Midterm #2 Due at 11:59pm (Exam posted 10/27/2022 NO CLASS TODAY</b>
November 8, 2022	Ernesto Loera topic
November 10, 2022	Diana Olivas topic
November 15, 2022	Omar Rodriguez Moncivais topic
November 17, 2022	Christiancel Joseph J. Salazar topic
<b>November 22, 2022</b>	<b>Midterm #3 Due at 11:59pm</b>
November 24-25 2022	 <b>Thanksgiving - No class</b>

November 29, 2022	Vivian C. Torres, topic
December 1, 2022	NO CLASS- TIME TO DISCUSS FINAL
<b>December 2, 2022- Dead day</b>	<b>FINAL EXAM DUE - 11:59PM</b>
<p><b>Grading Policy:</b> Letter grades for this course will be assigned as follows:  90-100% A  80-89% B  70-79% C  60-69% D  0-59% F</p> <p>Student paper presentations will be 5-10 slide Powerpoints. Each student who has a topic, will write a quiz that will be based on the paper they select, and administered prior to viewing the module.</p> <p>Each presenting student will be evaluated based on: Overall Presentation (no typos!)(<b>10 pts Slide 1</b>) Introduction- do you understand and explain why this paper was written? (<b>10 pts Slide 2 Why</b> was each set of experiments completed? (<b>20 pts</b>) How was each set of experiments completed?- please copy/paste graphs <b>and</b> explain what was the <b>main</b> experiment and then what did the authors see (<b>30 pts</b>). 3) Did the authors demonstrate what they said they demonstrated? (<b>10 pts</b>) 4) How does this fit in with what you know- how did the authors make it all fit in? (<b>10 pts</b>) 5) what might you change or add to the paper? (<b>10 pts</b>).</p> <p>You <i>may</i> or <i>may not</i> be called upon each day.  If you are not present in class you will earn a "0" regardless of whether you turn in a presentation.  If you presentation comes up, you will be expected to present it.</p> <p><b>Make-up Policy:</b> There will be <b>NO MAKEUP PRESENTATIONS OR EXAMS</b>. If you miss an exam, you will earn the score of <b>ZERO</b>.</p> <p><b>Grade Disputes:</b> <b>UNDER EXTENUATING CIRCUMSTANCES, STUDENTS WILL BE ALLOWED TO MAKE UP A MISSED PRESENTATION. THIS PRESENTATION MUST BE MADE UP BY RECORDING YOUR PRESENTATION AND SUBMITTING IT ON BB WITHIN ONE WEEK OF THE MISSED PRESENTATION.</b></p> <p><b>Attendance Policy:</b> If you miss an assignment there are <b>NO MAKEUPS UNLESS YOU HAVE WRITTEN PERMISSION FROM THE INSTRUCTOR.</b></p>	

<b>Academic Integrity Policy:</b>	The UTEP academic integrity policy will be strictly enforced during exams. Any student failing to adhere to the policy will be disciplined. You are expected to talk to your classmates about the material we are learning. You can have anyone on the planet (except the instructor) edit, review, make suggestions on your submitted work. One goal of this course is to encourage collaboration.
<b>Civility Statement:</b>	Students with disruptive behavior will be asked to leave the class.
<b>Disability Statement:</b>	<b>If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148, <a href="mailto:dss@utep.edu">dss@utep.edu</a>, <a href="mailto:cass@utep.edu">cass@utep.edu</a> or go to Room 106 Union East Building. For additional information please visit the CASS website at <a href="http://www.sa.utep.edu/cass">www.sa.utep.edu/cass</a>. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.</b>
<b>Military Statement:</b>	<b>If you are in the military, with the potential of being called up for military service and/or training during the course of the semester, you are encouraged to contact Dr. Vines as soon as possible</b>

## TECHNOLOGY REQUIREMENTS

This content for this course is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. **Google Chrome** and **Mozilla Firefox** are the best browsers for Blackboard; **other browsers may cause complications**. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop to use Blackboard. You will need to download or update the following software: Microsoft Office, and Adobe Acrobat Reader. Check that your computer hardware and software are up-to-date and able to access all parts of the course. In addition, you will need to be able to access the library at UTEP.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions. **ALL ASSIGNMENTS MUST BE SUBMITTED ELECTRONICALLY.**

**IMPORTANT:** If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. **Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!**

**COURSE COMMUNICATION:** *How will we stay in contact with each other?*

Because this is an **IN person class**, we can meet during class time, presentations, and office hours:

- **Office Hours:** I will have office hours for your questions and comments about the course. My office hours will be held in BRSB4.124: 2:30-3:30 p.m, on Tuesdays ( Mountain Standard Time).
- **Email:** If you e-mail I will make every attempt to respond to your e-mail within 24-48 hours of receipt. When e-mailing me, be sure to use the “Contact Dr. Vines” tab in BlackBoard. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to sign it with your first and last name, and your university identification number.
- **Discussion Board:** If you have a question that you believe other students may also have, please post it in the Help Board of the discussion boards inside of Blackboard. Please respond to other students’ questions if you have a helpful response.
- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

## NETIQUETTE

As we know, sometimes communication online can be challenging. It’s possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep these netiquette (network etiquette) guidelines in mind. Failure to observe them may result in disciplinary action.

- Always consider audience. This is a college-level course; therefore, all communication should reflect polite consideration of other’s ideas.
- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment, profanity or inappropriate postings will be tolerated.
- When reacting to someone else’s message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; **all postings to it should be considered private and confidential**. Whatever is posted on in these online spaces is intended for classmates and Dr. Vines only. You are forbidden to copy documents and paste them to a publicly accessible website, blog, or other space.

**COURSE POLICIES:** What you need to do to be successful in the course.

## ATTENDANCE AND PARTICIPATION

Attendance in the course is determined by participation in the class discussions and quizzes. Your participation in the course is important for your learning and success and for creating a community of learners. Participation is determined by completion of the following activities:

- **Reading/Viewing** all course materials to ensure understanding of assignment requirements
- **Participating in engaging discussions** with your peers on the discussion boards (grading rubric provided in the “grading information” area of each forum)
- Other activities during class such as asking questions or addressing questions about your presentations.

Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

## EXCUSED ABSENCES AND/OR COURSE DROP POLICY

According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, **the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.**” See academic regulations in the UTEP Undergraduate Catalog for a list of excused absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I will drop you from the course. I will provide 24 hours advance notice via email.

### OR

If I do not drop you from the course, if you feel that you are unable to complete the course successfully, please let me know and then contact the [Registrar’s Office](#) to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.

## DEADLINES, LATE WORK, AND ABSENCE POLICY

Midterm Exams:

- Midterm Exams will be due on September 29<sup>th</sup>, November 3<sup>rd</sup>, and November 22<sup>nd</sup> at midnight (11:59 PM). **No late work will be accepted if the reason is not considered excusable.**

## ALTERNATIVE MEANS OF SUBMITTING WORK IN CASE OF TECHNICAL ISSUES

You should always submit your work with plenty of time to spare in the event that you have a technical issue with the course website, network, and/or your computer. You should save all your work (answers to discussion points, quizzes, exams, and essays) in a separate Word document as a back-up. This way, you will have evidence that you

completed the work and will not lose credit. If you are experiencing difficulties submitting your work through the course website, please contact the UTEP Help Desk. You can email me your back-up document as a last resort.

### **INCOMPLETE GRADE POLICY**

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

### **ACCOMMODATIONS POLICY**

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services \(CASS\)](#). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at [cass@utep.edu](mailto:cass@utep.edu), or apply for accommodations online via the [CASS portal](#).

### **COVID-19 Accommodations**

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible so we can arrange necessary and appropriate accommodations.

### **SCHOLASTIC INTEGRITY**

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

### **CLASS RECORDINGS**

Please do not record the class.

## **COPYRIGHT STATEMENT FOR COURSE MATERIALS**

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

## **COVID-19 PRECAUTIONS**

Please follow current CDC guidelines.

## **COURSE RESOURCES:** Where can you go for assistance?

UTEP provides a variety of student services and support:

### **Technology Resources**

- [Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

### **Academic Resources**

- [UTEP Library](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

### **Individual Resources**

- [Military Student Success Center](#): Assists personnel in any branch of service to reach their educational goals.
- [Center for Accommodations and Support Services](#): Assists students with ADA-related accommodations for coursework, housing, and internships.
- [Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.