Many thanks for choosing molecular biology and welcome to your hybrid course. I am Renaud Geslain your instructor. I have been a passionate professional molecular biologist for over 20 years, and I am very excited to share with you all the marvels of my favorite field.

Course description
Together we will describe the functions of the most fundamental biomolecules of life, such as DNA, RNA, and proteins and more importantly discuss their relevance to the world we live in. We won't use any specific textbook. I created the course materials from scratch including videos, drawings, worksheets and activities; all are original. I picked only the most relevant and current topics. Are you interested in gene therapies, GMOs, DNA forensics, genome editing and ancient DNA? You knocked on the right door!

Course learning outcomes
After completing this course and having actively participated in discussions and assignments you will be able to:

- Explain the structure, synthesis and functions of DNA, RNA, and proteins.
- Interpret current literature in molecular biology.
- Discuss the relevance of nanoscopic biomolecular mechanisms to the world we live in.
- Predict the molecular target and the biological effects of pharmaceutical drugs based on their molecular structure.
- Recognize the extensive involvement of chemistry, structural biology and cellular biology in modern molecular biology.
- Assess the objectivity of science news in popular media.
Do I need to be computer savvy to take this hybrid course?
Not really; the few teaching tools that we will be using this semester have a straightforward interface. That being said, you will need a reliable Internet connection, a laptop or other computer, some knowledge of OAKS, and a webcam if you want to participate in a way other than text.
For all computer, software or access problems, please contact:
1. Student Computing Support (843-953-5457; studentcomputingsupport@cofc.edu)
2. Helpdesk (843-953-3375; helpdesk@cofc.edu)

How do I know what to study?
Easy! This course is organized in 7 modules. Each module will last two weeks. Modules will open sequentially every other Sunday and remain open until the end of the course.

Each module consists in 3 submodules:
1. “Read” - you will be asked to carefully read three provided research news articles published in the scientific journal Nature. Each article is 1-4 page long and will take about one hour to read and understand. Total estimated weekly time for the “Read” submodule: at least 3 hours.

2. “Do” – you will be asked to complete and submit assignments 2 to 4 (see above) at the end of each module. In addition, your instructor will provide you with a series of non-graded problems to apply and evaluate the knowledge acquired in the module. Total estimated weekly time for the “Do” submodule: at least 3 hours.

3. “Build your own textbook” – you will be asked to edit the lecture notes provided by your instructor and add your own content in the form of additional information and figures. Total estimated weekly time for the “Build your own textbook” submodule: at least 2 hours.

What should I do if I have a course related question?
The great news is that we are all going to help you!
1. Write your question on our Discussion Board anytime.
2. Give your classmates some time to read your question and post their answer.
3. Reply to your thread to thank participants and indicate whether you received the help you needed or if you need further assistance. Please be patient and never give up until you got your answer.
New question? Start a new thread and repeat the process.

What should I do if I have a personal issue?
If your issue cannot be addressed on the Discussion Board, please remember that I am here for you personally throughout the semester.
1. Contact me by email anytime and allow me up to 24 hours to reply on weekdays and up to 48 hours on weekends.
2. Need to speak to me instead? Request an appointment by email and I will set up a Zoom Meeting so we can chat and see each other live.

Do you have scheduled office hours?
Absolutely! From 11 to 11:45 AM every Thursday. The great news is that there is room for all of you at the same time in my Zoom Virtual Office! You have a course related question and want a live explanation? You just want to hang out to see what the discussion is about?
1. Meet me in my Zoom Virtual Office on Thursday at 11 AM
2. Raise your virtual hand to ask your question or type it using the chat tool
3. Enjoy while I struggle answering your question 😊 – just kidding, I welcome any questions and it is always a pleasure to talk about molecular biology.
How can I bond with my fellow classmates?
I understand that you may feel alone behind your computer at first. Please remember that you belong to our molecular biology community. Here following are a few ways to stay engaged with your classmates in our online course.

1. Have fun helping each other and sharing your knowledge. If you notice a colleague has asked a question on our Discussion Board, please jump in and offer assistance.
2. Always be kind and ethical. If you are not sure about your tone simply ask yourself the following question: "How would I feel if I received this message?"
3. Be clear and concise; take pride in crafting sharp questions and inclusive answers.

As an incentive, I will give up to 2 points of extra credits to anyone who follows criteria 1-3 above.

Do you have any tips on how to succeed in this course?
1. You should acknowledge that this hybrid course is going to be as demanding as a regular face-to-face course. In other words, be mentally prepared to spend a fair amount of time working within each content module, participating to Zoom lectures and engaging in discussions.

2. I encourage you to prepare a biweekly schedule to work through each module in order to best manage your time and stay productive. The great news is that all modules share the same structure and that your biweekly schedule will most certainly carry from one module to the other. We all have different schedules this semester and I know that some of you have to work professionally to earn a living; for those reasons I am only suggesting the following schedule:

   | M | T | W | R | F | Sa | Su | M | T | W | R | F | Sa | Su |
---|---|---|---|---|---|----|----|---|---|---|---|---|---|----|
**Read article** | | | | | | | | | | | | | | |
**Study article questions** | | | | | | | | | | | | | | |
**Zoom lecture** | | | | | | | | | | | | | | |
**Edit notes/build textbook** | | | | | | | | | | | | | | |
**Write keywords definitions** | | | | | | | | | | | | | | anytime
**Take molec nerd pictures** | | | | | | | | | | | | | | anytime
**Write down burning questions** | | | | | | | | | | | | | | anytime
**Submit best molec nerd picture** | | | | | | | | | | anytime | | | |
**Submit best burning question** | | | | | | | | | | | | | | anytime
**Take quiz** | | | | | | | | | | | | | | anytime
**Interact with peers on forums** | | | | | | | | | | | | | | anytime
**Contact instructor for help** | | | | | | | | | | | | | | anytime

3. Never give up. I understand that it will take some time to get used to the way things are organized. Once you get it however, molecular biology will become a pleasant routine.

4. Expect to spend about 6-8 hours per week reading, participating to lectures, discussing with your classmates and preparing assignments.

5. Regularly check the course OAKS page, log in at least 4 days per week.

6. Ask questions related to course content and readings as they arise.
SNAP Accommodations
I want all motivated students to succeed in this course. If you have an approved SNAP accommodation, please email me the Professor Notification Letter and discuss your needs during the first week of class via email.

Academic Integrity
You are responsible for understanding and adhering to College policies regarding academic honesty, as specified in the current Student Handbook: http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

All work must be original and must reflect careful preparation. Standards of originality and thorough preparation require that the viewpoint, structure, and style of writing and presentations be your own. The undocumented use of someone else’s words or ideas in any medium is a serious offense, subject to disciplinary action that may include failure in the course and/or dismissal from the College. Please remember that unauthorized collaboration—working together without permission—is a form of cheating.

Not sure to do the right thing? Please ask me for assistance, I am always happy to help.

Grading Scale

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<td>80 – 82%</td>
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<td>77 – 79%</td>
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Assessment

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TOTAL 100
Below, please find eight additional syllabus statements that were drafted by our administration and that are common to all Spring 2021 courses:

1. Honor Code and Academic Integrity
   “Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when suspected, are investigated. Each incident will be examined to determine the degree of deception involved.

   Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file.

   Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent.

   Students can find the complete Honor Code and all related processes in the Student Handbook at: [http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php](http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php).”

2. Disability/Access Statements
   The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.
3. OAKS
OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted.

4. Continuity of Learning
Due to social distancing requirements, this class will include a variety of online and technology enhanced components to reinforce continuity of learning for all enrolled students. Before the drop/add deadline, students should decide whether the course plan on the syllabus matches their own circumstances.

5. Recording of Classes
Class sessions will be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class.

6. Inclement Weather, Pandemic or Substantial Interruption of Instruction
If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

Center for Student Learning:
The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843) 953-5635.

7. Mental & Physical Wellbeing
At the college, we take every students’ mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at http://counseling.cofc.edu or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit http://counseling.cofc.edu/cct/index.php, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

8. Food & Housing Resources
Many CofC students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (http://studentaffairs.cofc.edu/about/salt.php). Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to Professor ABC if you are comfortable in doing so.

The College of Charleston offers many resources for LGBTQ+ students, faculty and staff along with their allies.

Preferred Name and Pronoun Information
On Campus Gender Inclusive facilities
Campus Resources
College of Charleston Reporting Portals
National Resources for Faculty & Staff
GSEC Reports
Documenting LGBTQ Life in the Lowcountry (CofC Addlestone Library Special Collections Project)
College of Charleston Quality Enhancement Plan (QEP)
Articles about CofC and LGBTQ+ Issues