

Independent Research in Bioinformatics BSC4913/14

3 credits

The class will meet every other week in room MCS 1254 on Wednesdays from 3 to 5 pm. The class will be split into two groups, each meeting in one-hour blocks (3pm to 4pm and 4pm to 5pm). Specific class dates and group compositions will be decided after the first class.

Instructors

Dr. Valérie de Crécy-Lagard, Distinguished Professor, Microbiology and Cell Science, Room 1251

Dr. Meixia Zhao, Assistant Professor, Microbiology and Cell Science, Room 1006

Course Website

Login available through Canvas <https://elearning.ufl.edu/>

Contact Information

Email (the most efficient): Use Canvas e-mail for instructors as a priority. (If you do not have access to the e-learning platform and if it is an emergency, use vcrecy@ufl.edu AND meixiazhao@ufl.edu). For resolving technical issues, visit the helpdesk website (<https://helpdesk.ufl.edu>) or call 352-392-4357.

Office Hours

By appointment (Live or Zoom)

Course Description

<https://microcell.ufl.edu/mcs-apps/bioinfo/site/BioinfoCapstone.html>

Independent Research in Bioinformatics provides students with an opportunity to perform real-world bioinformatics research within a biology-related laboratory at the University of Florida. Students will plan and execute a 1-semester bioinformatics research project under the supervision of a UF research faculty advisor. In addition, students will gain experience communicating their research project to a diverse audience and will learn how to write up their work in the form of a scientific research paper.

IN THE BIOINFORMATICS MINOR CAPSTONE EXPERIENCE, YOU WILL GAIN:

- Practical bioinformatics research experience in a 'real-world' situation.
- Guidance in scientific communication and how to write a bioinformatics research paper.
- Networking opportunities with other UF students engaged in bioinformatics.

Prerequisites:

You will need to have completed at least 2 of the 3 courses required for the bioinformatics minor:

BSC 2891 or CAP 5510
BSC 4434C
MCB 4320C

You will need at least a B grade in all the minor courses you have completed to register for BSC 4913.

Recommended Text

Scientific Writing and Communication: Papers, Proposals, and Presentations 4th Edition, Angelika H. Hofmann ISBN-13: 978-0190063283

Grading Scheme

Course letter grades will be derived using the following grading scheme, based on the student's earned percentage of total possible points available from all course assignments.

Letter Grade	Range	
A	100%	to 90%
A-	< 90%	to 87%
B+	< 87%	to 84%
B	< 84%	to 80%
C	< 80%	to 70%
D	< 70%	to 60%
F	< 60%	to 0%

For more details of the University of Florida grading policy please visit:
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Assignments

One-page Project Summary (10 points)
Paper outline (10 points)
Paper First draft (10 points)
Paper Second Draft (10 points)
Final paper (100 points)

Attendance: Class attendance is mandatory. For planned excused absences, such as interviews, you must contact the instructor 48 h in advance of the missed class and provide adequate documentation. Accommodations to connect by zoom can be organized with advance notice.

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

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. 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/>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Software and AI Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

You may use AI programs e.g. ChatGPT to help generate ideas and brainstorm. However, you should note that the material generated by these programs may be inaccurate, incomplete, or otherwise problematic. Beware that use may also stifle your own independent thinking and creativity. You may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with due consideration for the quality of the reference, which may be poor). Any plagiarism or other form of cheating will be dealt with severely under relevant UF policies.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu*
Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- *Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>.*
- Student Success Initiative, <http://studentsuccess.ufl.edu>.

Student Complaints

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>