

UO Bioinformatics and Genomics Master’s Program

Student Handbook

Founded in 2012, the BGMP track within of the Knight Campus Internship Program (KCIP) trains students in the real-world knowledge and skills necessary to be successful as entry level bioinformatics scientists in the public and private sector. We believe an advanced degree should not only provide rigorous academic training but should also help students land a job and prepare for a successful career. The intent of this handbook is to ensure students have a clear understanding of the program’s policies and expectations.

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Knight Campus Overview

Mission: Science advancing society

Vision: Dramatically shorten the timeline between discovery and societal impact through world-class research, training, and entrepreneurship in a nimble scientific enterprise.

Goals:

- Redefine the modern research university by fostering world-changing research unfettered by traditional academic boundaries
- Serve as the educational engine driving the new economy of Oregon
- Transform student education through discovery-driven learning
- Engage the public in the excitement and creativity of scientific research
- Foster diverse perspectives and participation in scientific research
- Improve the health and wellbeing of the citizens of Oregon, the nation, and the world

Knight Campus Internship Program Mission Statement

The KCIP trains career ready students in high demand fields while providing benefit to University of Oregon (UO) research endeavors. The KCIP currently consists of the Bioinformatics and Genomics Master’s Program (BGMP) and the Master’s Industrial Internship Program (MIIP).

Program Overview

The BGMP begins summer term with intensive course work.

We seek to emulate a real-world work environment by creating situations that require students to problem-solve in teams toward a goal with time constraints – encouraging students to utilize team skills to achieve successful outcomes.

Internships allow students to apply their new skills in real time and take them to the next level. These paid internships last 9 months. Though internships are not guaranteed, historically, more than 98% of students have completed internships. The vast majority of students are hired on by the host site or by a different site soon after their internships are completed.

Statement of Inclusion

The BGMP is committed to creating an inclusive environment where all individuals can excel. Students are encouraged to explore the resources available on campus through the Division of Equity and Inclusion: <https://inclusion.uoregon.edu/our-commitment>. As stated in the UO Mission statement, the BGMP is committed to “the principles of equality of opportunity and freedom from unfair discrimination for all members of the university community and an acceptance of true diversity as an affirmation of individual identity within a welcoming community.”

Inclusion Network and Inclusion Symposium

The KCIP hosts weekly optional workshops for students during the summer term. The meetings culminate in a symposium in Portland, typically during a Saturday in August.

The purpose of the Inclusion Meetings is to empower students with the foundational knowledge necessary to be inclusive team members and future inclusive leaders, while concurrently promoting a sense of belonging for fellow KCIP students.

An inclusive environment is one in which individuals of all walks of life (of all genders, sexual orientations, races, ethnicities, cultures, age, abilities, economic status, religions and citizenships) are free to express who they are, feel respected, are treated fairly, can fully participate in work and social activities without fear of abuse, harassment, discrimination, or unfair criticism.

Advising

General course requirements, academic, and professional advising are provided by program staff. Staff will initiate meetings throughout a student’s time on campus. Students are highly encouraged to make appointments with staff to take full advantage of their professional and technical expertise.

Safety

The program strives to provide an exceptional educational experience, which includes exposure to laboratory practices including occupational hazards, interdisciplinary methods, and safety practices. If a student feels uncomfortable or inadequately trained to handle an environmental hazard or lab task, the student should immediately consult with an instructor and/or TA. Safety should be thought of in relation to the self, colleagues, lab mates, and equipment.

Course Work

Required Courses

There are 60 total credits to complete the program – 30 course work credits and 30 internship credits (see Table 1). During the summer term, students complete 12 credits during three sequential and interconnected courses. Students are required to demonstrate satisfactory academic progress in all course work (see *GPA requirements*).

Core Coursework

Table 1. Core Coursework

Term	Number	Name	Credits
Summer	Bi 621	Computational Methods in Genomic Analysis	4 graded
	Bi 622	Genomics Techniques	4 graded
	Bi 623	Topics in Genomic Analysis	4 graded
Fall	Bi 624	Genomics Research Lab	4 graded
	Bi 610	Advanced Biological Statistics I	4 graded
	Bi 630	Professional Communication in Science I	1 P/NP
Winter	Bi 625	Advanced Genomic Analysis	4 graded
	Bi 610	Advanced Biological Statistics II	4 graded
	Bi 631	Professional Communication in Science II	1 P/NP
Internship (3 terms)	Bi 601	Research Internship	10 P/NP
	Bi 601	Research Internship	10 P/NP
	Bi 601	Research Internship	10 P/NP
Total required credits			60

Elective Courses

In addition to the core courses, students may complete elective course credits, outside of summer term. Electives do not need to be within the major or at the graduate level. Courses within CIS, Biology, Chemistry, or Math may be of interest. Program staff can advise students on which courses to take based on academic and career interests and goals.

Internships

In late fall, students submit resumes for consideration by partners. The program hosts an annual scientific conference in early winter term that is coupled to an interview event. Program partners are invited to attend and interview students. This event launches the interview season, which continues through the spring term as students seek opportunities. Students in good academic and program standing will have an opportunity to interview with program partners.

The program determines the date when the first internship offers may be made to students. Offers include compensation and start date information and are typically communicated via email. Students are expected to conduct themselves professionally when accepting or declining offers and are highly encouraged to consult with program staff during this process.

Internships are not guaranteed; it is the student’s responsibility to secure an internship, either through interviews set-up through the program or opportunities identified by the student. Students must communicate with BGMP staff to ensure that a self-identified internship satisfies program requirements. Students must inform program staff when internship offers are received and should consult with program staff before committing to an internship. Students may not accept unofficial offers/soft offers (i.e. do not contain compensation information or are offered verbally). Students may not back out of internship commitments except under extraordinary circumstances and will only do so when under advisement of program staff.

Internship start dates vary, as these are determined by the company. The most common (but not exclusive) scenarios for internship start dates are the beginning of spring (April). With program approval, students may conduct research with faculty on campus to satisfy a portion or the entirety of the internship requirement (Table 2: Scenario 2). The goal of these research positions is to enhance and expand the student’s skills in bioinformatic approaches and afford them an opportunity to engage in exciting genomics research with esteemed UO faculty. UO research positions may be funded through the laboratory directly, if funding is available, or funded through a Graduate Employee (GE) position (e.g. teaching assistantship). Students are ultimately responsible for securing positions, but program staff can help advise students through the process.

Students typically enroll for **10 internship credits per term**. If an internship starts midway through a term, the student should consult with a BGMP staff member on the appropriate number of internship credits to enroll in for that term.

Table 2. Most common internship scenario 1 and alternative internship scenario

Term	Scenario 1	Scenario 2
<i>Summer 1</i>	12 credits – Core courses	
<i>Fall 1</i>	9 credits – Core courses and Optional elective	
<i>Winter 1</i>	9 credits – Core courses and Optional elective	
<i>Spring 1</i>	10 credits – Internship	10 credits – UO Research
<i>Summer 2</i>	10 credits – Internship	10 credits – Internship
<i>Fall 2</i>	10 credits – Internship	10 credits – Internship

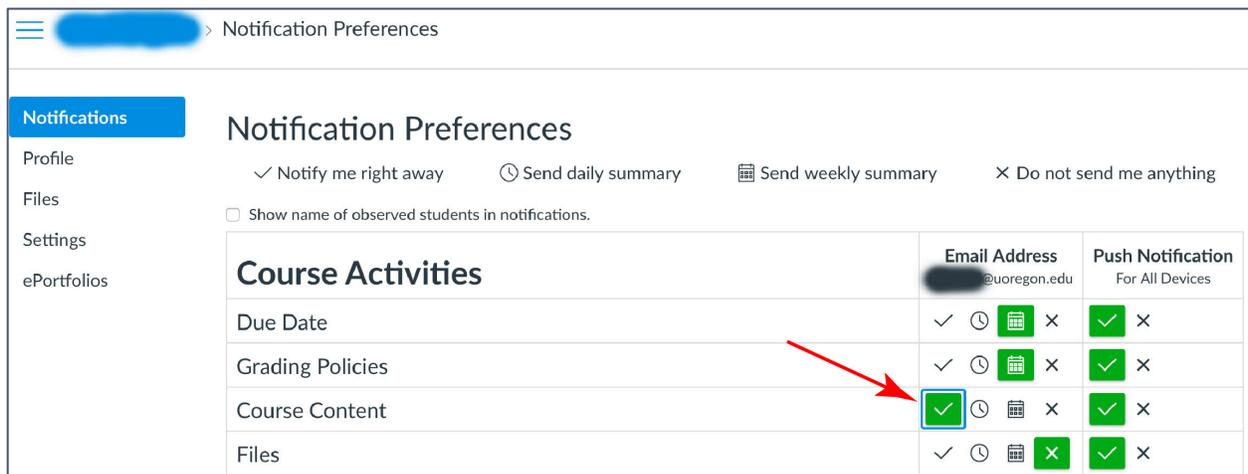
Internship Papers

In order to document successful progression of technical knowledge, a research paper summarizing work conducted during the internship, technical literature review relevant to the internship, or best practices for tool use is submitted each term a student is registered for internship credits. Term paper requirements are provided by the instructor of record.

Internship credits are taken as Pass/No Pass. Failure to meet term paper requirements may lead to a “No Pass” for the term. Papers that describe work conducted during an internship may need approval by the host site’s legal department prior to submission to the instructor of record. Students should be proactive in understanding the timeline for managerial approval.

Communication during internships

Students are expected to maintain contact with BGMP staff during their internship using UO email, Canvas, and Slack. If a student is not regularly checking UO email, they need to forward it to an email that is checked regularly (instructions here: <https://service.uoregon.edu/TDClient/KB/ArticleDet?ID=30799>). Students may continue forwarding UO email after graduation: (<https://service.uoregon.edu/TDClient/KB/ArticleDet?ID=52976>). To avoid missing assignment deadlines, students should turn on their Canvas Notification Preferences for Course Content (see Figure 1).



The screenshot shows the 'Notification Preferences' page in Canvas. The 'Course Activities' section is expanded, showing a table of notification preferences. A red arrow points to the 'Course Content' row, which has a green checkmark in the 'Email Address' column. The 'Push Notification' column for 'Course Content' also has a green checkmark.

Course Activities	Email Address	Push Notification For All Devices
Due Date	✓ [clock] [calendar] ✗	✓ ✗
Grading Policies	✓ [clock] [calendar] ✗	✓ ✗
Course Content	✓ [clock] [calendar] ✗	✓ ✗
Files	✓ [clock] [calendar] ✗	✓ ✗

Figure 1 – Notification preferences in Canvas.

Registration

To register for core coursework on DuckWeb, students will need course registration numbers (CRNs). CRNs for summer courses and internship credits will be provided by the program via students’ UO email addresses each term. They are *not* listed in the general course list for the university and thus cannot be found by searching the class list online. Once a student has the CRNs, they can input them into the class list on DuckWeb. Students should register by the end of the first week of classes each term to remain in good program standing.

To register for variable credit courses (internships) a student must register for 1 credit and then *change* to 10, or the desired number of credits as discussed with program staff.

Students who register after the deadline will be assessed a fee and require an approval from the department and program to register. For a full list of registration and drop/add dates, refer to the academic calendars found at: <https://registrar.uoregon.edu/calendars/academic>. It is the student's responsibility to check and adhere to these deadlines.

Books

Books are loaned to students. Program staff will coordinate the expected return date before the student departs for their internship. If a book is lost or damaged, it should be immediately reported to the course instructor. Students are responsible for replacing damaged or lost books.

ID Cards

Once a student arrives on campus, a Student ID card can be requested through the UO Card Office during a scavenger hunt orientation week. A photo may be in advance if preferred: <http://uocard.uoregon.edu/>.

Tuition & Fees

Tuition

Tuition for courses through *Winter 2021 will be assessed at \$555/credit*. Credits offered through the BGMP are the same rate for Oregon resident and non-resident students.

Tuition must be paid in full before a student can register for the following term. *Students must be registered by the "Last Day to add a class/process initial registration" to be in good standing with the program*. For a full list of registration and drop/add dates, refer to the academic calendars found at: <https://registrar.uoregon.edu/calendars/academic>.

Students who have financial aid awards will not receive their awards until their registration forms are processed.

Fees

Students pay the standard student fees for terms in which they are enrolled in any on-campus classes. Students pay reduced fees for terms in which they are exclusively enrolled in off-campus courses (i.e. Internship Credits). *Accurate fee assessment requires students to inform BGMP staff of their official internship start date*. Table 3 indicates the percentage of the fee the student pays based on whether they are enrolled in on-campus courses or exclusively enrolled in off campus credits. Fees are subject to change annually (reset each academic year at the start of fall term).

All new students must pay a one-time matriculation fee the term they enter the UO (currently

\$430 - this is subject to change).

A description of the fees and the standard cost for each term can be found at:

<http://registrar.uoregon.edu/costs/fees>.

Table 3. Summary of fee percentages students pay based on on-campus or off-campus enrollment.

	Matriculation Fee	Building Fee	Incidental Fee	Health Service Fee	Recreation Center Bond Fee	Recreation Center Fee	EMU Facility Fee	Tech Fee
Any term student is enrolled in on-campus credits	100% (one-time fee)	100%	100%	100%	100%	100%	100%	100%
Terms in which student is exclusively enrolled in off-campus credits	NA	100%	50%	0%	0%	0%	0%	100%

For information about financial aid, please contact the aid office at

<http://financialaid.uoregon.edu> or 1-800-760-6953 / 541-346-3221.

Working during the Program

The intense nature of the program makes it difficult to find time for work outside of the program during the summer term. Some students choose to work during the fall and winter terms, understanding that balancing the workload may be difficult and requires an effective time management strategy.

GE Positions

GE positions are made available through the department that is advertising the position. Students may apply to these positions directly: <https://gradschool.uoregon.edu/gtf-openings>. The program may periodically learn of openings and send these to students.

Program Expectations

Professional Conduct Standards

The program offers several opt-in activities to promote the professional development and external visibility of its students.

Partner-facing events (i.e. in-person and virtual introductions) have 3 requirements:

- Good academic standing (≥ 3.00 GPA) and successful completion of Bi630 Professional Communication in Science I
- No infractions of the UO Student Conduct Code:
<https://studentlife.uoregon.edu/conduct>

- Permission for program staff to serve as references via UO's Student Reference Request Form: <https://registrar.uoregon.edu/files/pdf/StudentReferenceRequestForm.pdf>

If a student fails to meet these requirements but would like to be considered for future professional development activities, a remediation plan and timeline must be created and approved by the program. Once the remediation plan is fulfilled and the student meets professional conduct standards, a student may be eligible to participate in extracurricular professional development activities.

UO Student Conduct Code

The UO student conduct code applies to all students in the program. Students will be asked to confirm they have read and understood the student conduct code before the first week of coursework. The full conduct code may be found at: <https://studentlife.uoregon.edu/conduct>.

Accessibility

The UO is working to create inclusive learning environments. Please notify the program if there are aspects of the program design that result in disability related barriers to participation. For more information, please contact the Accessible Education Center in 360 Oregon Hall, (541) 346-1155 or uoaec@uoregon.edu.

GPA Requirements

Students must have a cumulative GPA of 3.00 or above and complete no fewer than 60 credits (See Table 1), including 28 graded credits, 2 Professional Communication in Science credits (pass/no pass) and 30 internship credits (pass/no pass) to complete the program.

Program Probationary Warnings and Dismissal

Students who fail to meet department, program, or university requirements, or students who are not making satisfactory progress towards their MS degree are subject to probationary warnings and/or dismissal.

Prior to dismissal, a BGMP staff member and the Faculty Advisory Committee (FAC) will establish whether a probationary warning will be provided or if immediate dismissal is warranted. While the former is recommended, serious infractions may lead to immediate dismissal. The FAC is a group composed of UO faculty who ensure program alignment with broader departmental and university goals and initiatives.

If a warning is issued, the student will be placed on probation and the FAC will establish the necessary actions required for the student to be reinstated to good standing. Failure to meet the necessary actions provided by the FAC within the established time frame will result in dismissal from the program.

Graduation Requirements

Applying to graduate

To graduate, students must *APPLY to the Graduate School in the first two weeks of the term in which the student will complete all required credits*. The application and deadlines can be found on the Graduate School website under Current Students > Getting Ready to Graduate: <http://gradschool.uoregon.edu/>.

To ensure eligibility to graduate, please review the following graduate school requirements:

Continuous Enrollment Requirement

Unless On-leave status has been approved by the graduate school, students enrolled in the BGMP are required to be continuously enrolled (for a minimum of 3 graduate credits) until all requirements have been completed, with the exception of summer term.

Seven-year time-to-completion limit

The graduate school requires that graduate students must complete their degree within seven years. Beginning with the term the student is admitted into the program, students have seven years to complete their degree.

Degree Requirements

Degree requirements are based on the program, departmental and university requirements for the year that the student enrolled in the BGMP and outlined in this document. Students are advised to consult the graduate school website for a complete description of university requirements for the master's degree: <http://gradschool.uoregon.edu/>.

Graduation

The Biology Department requests that an email is sent to them after an application to graduate is submitted. They can also answer any questions about the process. Please contact

Biology Office: Graduate Program Assistant

Gabrielle Andrew

gandrew@uoregon.edu

The graduation ceremony occurs at the end of each spring term. Students may participate in the ceremony before or after formal degree completion. If a student would like to be included in the ceremony program, contact the Biology office at the beginning of the spring term and cc the BGMP. In addition, students should notify the BGMP if they plan to walk/participate in graduation. KCIP typically plans a celebratory reception for students who attend the ceremony.

Biology Office: Ingrid Newman – ingridk@uoregon.edu

BGMP: Leslie Coonrod – coonrod@uoregon.edu