Spring '23 Biology Registration Newsletter Fall '23 Course Edition

Fall 2023 Course Registration Window Apr. 4th through Apr. 14th

To help you prepare for Fall 2023 registration, we have compiled information you will need as you plan your upcoming semester. Please remember that a detailed description of policies, graduation requirements, *etc.* can be found in the <u>Biology Student Handbook</u>. A general guide to registration can be accessed from <u>Records and Registration</u>.

Click on a topic below to go directly to a section of the newsletter.

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Quick Access for Waitlists & Independent Research Forms

- Hey wait! Need a waitlist? Well, waitlists have a new look! Read the waitlist section to know
 the new procedures and click here when you are ready.
- Registering for Independent research? Talk to your professor first and then <u>click here</u> to fill
 out the Independent Research Form. Want to get involved in research? Reach the section
 <u>Additional Course Opportunities</u> to learn more about Independent Research!

NEW for Fall 2023

- BIO 390 Biology Internships
- BIO 399 Biology Research Internship is now offered during the Fall semester
- Read more about Biology "Topics" Courses <u>here</u>
- BioConnections will continue in Fall 23 click here to learn more

The Registration Process, 101

When can I register?

- Registration will occur from Apr 4 through Apr 14, 2023.
- You can continue to register for Fall 2023 until the first week of the Fall 2023 (end of add/drop period), but many courses will be closed long before then.

Academic Advising Appointments

- A Registration Hold has been placed on your account. This hold is to ensure you meet with your academic advisor. Once you have that meeting, your advisor will remove the hold and you will be able to register for classes.
- This semester, faculty members may continue to advise students through virtual and in-person meetings. Please look for an email from your advisor with further instructions before attempting to make an appointment.

What do I do if a course is full?

- Individual Biology wait lists are available for: BIO 211, 221, 231, and 498. All 300 and 400 level courses are combined on a single waitlist.
- Waitlist policies are summarized here, and can be read in full on the <u>Biology website waitlist</u> page.
 - o Only submit a wait list form once your registration window has opened, and the waitlist has been made available. If you submit your form prior to your registration window, you will automatically be moved to the end of the list.
 - o Putting your name on a waitlist does not guarantee you a seat in that class.
 - o Only exceptional circumstances (e.g., not graduating on time) will be considered for registering students in a course above the cap.
- Chemistry and Physics waitlists are handled by their departments. You can visit the wait list pages on the <u>Chemistry</u> and <u>Physics</u> websites for more information. Please note that Chemistry and Physics courses cannot accept anyone above the cap.
- Waitlists are made available once the majority of seats in all sections of a given course are full. Access the Biology department waitlists here.

Biology Registration Policies

- <u>Holding seats</u>. Registering in a course section in order to hold a seat for another student is a violation of TCNJ's Academic Integrity Policy for both the student holding the seat and the student taking the held seat. Course registration will be monitored by the chair for anomalies suggestive of seat holding.
- <u>Getting help</u>. Please include your PAWS ID number in any correspondence that concerns registration, enrollment, graduation requirements, or problems with your transcript with your advisor or the department chair, Dr Clement (<u>clementw@tcnj.edu</u>).

Correlate Course Updates for Fall '23 Registration

- <u>Physics 202</u>. First, PHY202 is <u>not required</u> of any Biology major. With that in mind, many students are interested in taking PHY202 to fulfill prerequisites for medical school, graduate school, and more. For those who are interested in taking PHY202, please note MAT128/CalcB is a prerequisite for this course. What does this mean for you? Read on!
 - o If you have taken MAT128, you can register for PHY202 yourself when your registration slot opens.
 - o If you have not taken MAT128 and you plan to or already have taken STA215:
 - You can opt to take PHY122, which is an algebra-based physics.
 - You can take PHY202 if you have a B or higher in MAT127/CalcA and PHY201. If this applies to you, please email Dr. Magee (magee@tcnj.edu) and Ms. Chamberlin (chambee2@tcnj.edu) when your registration slot opens to ask them to enroll you in Phy202. The prerequisites will prevent you from being able to register yourself. Be sure to include your PAWS ID number in your email.
 - o Please confer with your advisor during your appointment to plan which option is the best fit for you. Please be mindful that these prerequisites are important to ensuring you are prepared to take PHY202.

Policies for Off-Campus Courses

• Off-campus study

- o *NJ Community or County Colleges*: Off-campus study (*e.g.*, a summer course) at a NJ county college is regulated by <u>NJ Transfer</u> (njtransfer.org). You can use this website to see the course equivalencies of any community or county college in New Jersey and understand what courses or requirements that course would fulfill at TCNJ.
- o *Off-campus study elsewhere*. Off-campus study at a non-NJ community college or a domestic four-year college must be approved by the chair of the department to determine which course(s) would be transferable to TCNJ. Be sure to confer with Dr. Clement before enrolling in these courses to determine the course equivalency. Here is the <u>form</u> for approving off-campus study.
- o Consult with Dr. Clement regarding online (distance learning) laboratory courses. As a general rule, courses with online labs are not approved.

Study abroad

- o Can Biology majors study abroad? Of course! Any Biology major interested in studying abroad should contact the <u>Center for Global Engagement</u> and speak to their advisor well before they wish to travel abroad.
- o Any course to be taken abroad for biology option credit must receive approval of Dr. Clement before you enroll in the course.

Fall '23 Course Listing

Below is a list of core courses and option courses offered this Fall '23. Note that courses marked with OE also fulfill the Organisms & Evolution requirement.

Core Courses		
BIO 201 — Foundations of Biological Inquiry	BIO 221 — Ecology and Field Biology	
BIO 211 — Cell Biology and Biochemistry	BIO 231 — Genetics	

Options Courses		
BIO 301 — Human Anatomy & Physiology I*	BIO 390 — Biology Internship	
BIO 305 — Systematic Biology	BIO 399 — Biology Research Internship	
BIO 312 — Microbiology	BIO 413 — Microanatomy	
BIO 315 — Plants and People	BIO 434 — Molec Bio of Gene Expression	
BIO 343 — General Entomology (OE)	BIO 470 — Genetics of Human Disease	
BIO 370A,B — Topics: Herpetology (OE)	BIO 498A — Biology Seminar (TBA) ⁺	
BIO 370C — BioConnections: Food and Environment^	BIO 498B — Biology Seminar (TBA) ⁺	

^{*} Not available as a major option for most Biology students.

Research, Internship, and Course Assistant Opportunities

In the Biology department, there are additional opportunities for students to earn course credit including Independent Research, Biology Research Internship, Biology Internship, and Course Assistants. Each of these types of courses require enrollment through a form or application – you will not be able to add them to your shopping cart. See below for details and reach out to Dr Clement with questions (clementw@tcnj.edu).

Independent Research

- Independent research is an excellent way to acquire a strong foundation in biology by engaging in original research under the direction of a faculty member. If you're interested in research, talk with your advisor during your academic advising session. It is also strongly advised to discuss your interest in a given lab's research with the lab's faculty member well in advance of registering. Learn more about independent research from our website.
- To register for independent research, you must have approval from a faculty member and discuss which course and number of units (often either 0.5 or 1 unit) prior to registering. The three courses include (full descriptions and syllabi are in the Biology Student Handbook):
 - o BIO 393 Independent Research in Biology I
 - o BIO 493 Independent Research in Biology II
 - o BIO 494 Honors Independent Research in Biology II
- Once you have conferred with an independent research faculty member, you need to fill out
 the <u>Independent Study Qualtrics</u> form to be placed in the appropriate course. This form will
 be sent to your advisor to be approved before you are registered.

[^]This is a 0.5 unit course. This course can count as a Biology options course <u>if</u> combined with a second BioConnections course.

[†] Biology Seminar topics will be announced in late summer. Students should enroll in BIO498 no sooner than one semester prior to their planned date of graduation.

- Most Biology degree plans allow one unit of Independent Research to substitute for a Biology options course. This can be indicated when filling out the Independent Study qualtrics form.
- If you are only taking a total of three courses next semester, it is important that you fill out this form and send it in as close to your registration window as possible. There is no need to register for a course you do not intend to take just to have full time status as you wait to be enrolled in research.
- Course overload (taking >4.5 units) to enroll in research is rarely approved.

Independent Research in Biology Capstone

- If you have completed at least one course unit of BIO 493 or BIO 494, you may complete your capstone by taking BIO 495 or BIO 496 with the same instructor.
 - o BIO 495 Independent Research in Biology Capstone
 - o BIO 496 Honors Independent Research in Biology Capstone
- To register for BIO 495 or 496, first confer with your research faculty mentor. Then, fill out the <u>Independent Study Qualtrics</u> form to be placed in the appropriate course. This form will be sent to your advisor to be approved before you are registered.
- BIO 495/496 Independent Research in Biology Capstone may substitute for BIO 498 Biology Seminar.

Biology Internship - BIO 390

- If you are pursuing off-campus experiences related to Biology that will enrich your understanding of applications of Biology in the workplace, you can receive course credit for this experience.
- If you are interested in this opportunity, please reach out to the Internship Coordinator, Dr. Pecor (pecor@tcnj.edu) to discuss whether your experience could qualify for credit.

Biology Research Internship — **BIO 399** - (NOW offered in the Fall too!)

- A number of local pharmaceutical and biotech companies, as well as universities and ecological field stations throughout the country, offer undergraduate summer research opportunities that qualify for academic internship credit. If you participate in such a program, you might consider registering for BIO 399 Biology Research Internship.
- If you are interested in this opportunity, contact the Research Internship Coordinator, Dr Erickson (erickson@tcni.edu) to discuss whether your experience could qualify for credit.

Course Assistants — BIO 300

- The Course Assistant Program in Biology provides students with the opportunity to mentor students in introductory and options courses. Currently, Course Assistants are placed into nearly all core courses and select upper level courses.
- If you are interested in being a Course Assistant, we encourage you to attend the information session held during registration. In most cases Course Assistants had to have already taken the course they are interested in being a Course Assistant for.
- To express interest in being a Course Assistant, you are asked to fill out an interest form with your top choices and availability based on your courses for the following semester. This form will be made available during the Course Assistant Information session and emailed to students during the registration period.

Looking Ahead

Below is a list of some of the Biology option courses likely to be offered during <u>Spring 2024</u>. Please note this list is neither exhaustive nor guaranteed. Courses designated organisms and evolution are noted by OE.

BIO 301 — Human Anatomy and Physiology I*

BIO 445 — Cancer Genetics

BIO 341 — Biology of the Seed Plants (OE)

BIO 474 — Freshwater Ecology

BIO 480 — Neurobiology

Selected Fall '23 Course Descriptions

Below are brief references for courses that are either new or have special attributes. Be sure to refer to PAWS for descriptions and prerequisites of all courses offered.

- A. **BIO 301 & 302 Human Anatomy and Physiology I & II**. Students who plan to pursue Physical / Occupational Therapy or Physicians' Assistant programs, or are in an education program, may count one of these two courses as a Biology major option with the chair's approval. These courses cannot serve as an option for most students and are not recommended for medical school preparation.
- B. **BIO 370A,B: Topics: Herpetology.** The study of amphibians and reptiles from anatomical, physiological, behavioral, ecological, and evolutionary perspectives. Lecture only (choose one of two sections available).
- C. BIO 370C: Topics/Biology Connections: Food and Environment. Bio-Connections is a new course to help students use their biology education to help make sense of information in the news and other media. It seeks to help you to make connections between concepts you are learning in your core courses and real-world societal issues, and to practice evaluating the use of scientific information in policy-making and influencing how people use the information. It is also a chance to explore a topic of interest without the pressure of a full course! You will read a nonfiction book for a deep dive into multiple perspectives on a given topic, and evaluate related scientific information and mass media interpretations of the issues. This first offering of Bio-Connections will explore health and environmental issues related to food production and choices. This course meets once per week for 80 minutes and is 0.5 course units. It can be combined with a second Biology Connections course to fulfill a Biology options course requirement.
- D. **BIO 470A: Topics: Genetics of Human Disease**. The Genetics of Human Disease applies principles from the Biology Core Curriculum to the study of human genetic diseases and syndromes. Essentially, this course takes genetic, genomic, molecular, and biochemical approaches to the analysis of disorders that affect the major human systems. For each system, we will evaluate the inheritance of diseases in families, mapping of the disease loci, molecular and biochemical mechanisms that result in disease, and explore current diagnostic tools and treatments. The writing assignments for the course will cover the dramatic social implications of novel genetic screening technologies, the application of high-throughput genome sequencing projects, cloning, the use of embryonic stem cells, and related topics that impact human health. Lecture only.

^{*} Not available as a major option for most Biology students.