School of Health Studies

Western HealthSciences

HS 1300B/2300B: Systemic Approach to Functional Human Gross Anatomy

Winter| 2026

Prerequisites: Grade 12U Biology or equivalent is strongly recommended. Anti-requisite(s): Kinesiology 2222A/B; Health Sciences 2300A/B; Nursing 1330A/B; Health Sciences 1300A/B; Kinesiology 1060A/B; Anatomy and Cell Biology 2200A/B; the former Anatomy and Cell Biology 2221; the former Health Sciences 2330A/B.

Note: Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Course Information

Dr. Sean McWatt, PhD
sean.mcwatt@uwo.ca
Office Hours: TBD
Lectures: Online (asynchronous)
Labs: In person

Land Acknowledgement

We acknowledge that Western University is located on the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous Peoples whom we recognize as contemporary stewards of the land and vital contributors of our society.

Accessibility Acknowledgement

Meaningful ways to incorporate equity into the student experience are important to the School of Health studies. To that end, we honour all manner of differences inherent within the student population and incorporate accessible options for inclusion to the best of our abilities in each course offering.



Course Description

A gross anatomical description of systemic structure and function of the human body, with emphasis on skeletal, muscular, and cardiovascular systems. Integration between systems will be discussed using clinical examples related to sport, medicine, and physical therapy. This is an introductory level, lecture-based course for students in the Faculty of Health Sciences.

Welcome to **Functional Human Gross Anatomy**! Our teaching team is delighted to have you join us this term. In this course, we will focus on learning the basics of human anatomy, with specific attention to the **musculoskeletal** (muscles and bones), **nervous** (brain, spinal cord, and neurons), **cardiovascular** (heart and vessels), and **respiratory** (lungs and breathing) systems, which will prepare you for deeper study into the rest of the body in KIN 3222B/HS 3300B. Anatomy is a fundamental discipline that will also support your understanding of core concepts related to health and disease in your degree ahead. The course is cumulative, and voluminous in nature, so we encourage you to **stay involved, ask questions**, and **participate** as much as possible – most importantly, be sure to complete the online lecture modules before coming to your lab section. We look forward to meeting you soon!

Overall, the spirit of this course is to foster authentic learning, critical thinking, active questioning, and an appreciation for health and disease from a gross anatomical perspective.

Learning Outcomes

By the end of this course, a successful student should be able to:

- Communicate the locations, functions, and movements of bodily structures using correct anatomical terms.
- Explain the basic structure of the nervous system, differentiating between the central and peripheral nervous systems, as well as between the somatic and autonomic nervous systems.
- Describe how the autonomic nervous system regulates basic homeostasis in the body.
- Identify major surface anatomy landmarks, bones, joints, muscles, nerves, organs, and vessels related to the upper limb, lower limb, and trunk by name, location, and function.
- Describe neuronal conduction, muscle contraction, key events of the cardiac cycle, and mechanics of breathing.
- Explain how the heart and lungs interact to form the cardiorespiratory system, differentiating between systemic and pulmonary circuits.
- Explain and predict functional implications of musculoskeletal, neural, and cardiorespiratory changes in aging, exercise, and injury based upon clinical signs and symptoms.

Course Format and Timetable

Note: the timetable is tentative and subject to change as needed.

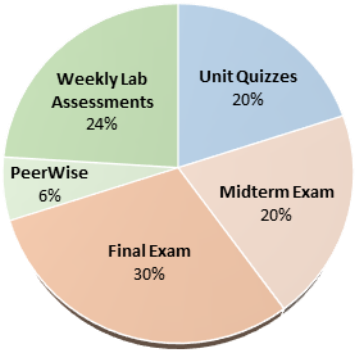
Week	Date			Unit	Topic(s)
0	JANUARY	5 – 9		**1:** Introduction	Anatomical terminology and bones
1		12 – 16*			Joints, cartilage, and muscle
2		19 – 23		**2:** Nervous System	Central and peripheral nervous systems
3		26 – 30		**3:** Upper Limb	Axilla and brachial plexus
4	F	2 – 6			Shoulder, arm, and elbow

5		9 – 13			Forearm and hand
–		**16 – 20**		**FALL READING WEEK**	
7		23 – 27		**Midterm Review Week**	**MIDTERM EXAM (TBD)**
8	**MARCH**	2 – 6		**4:** Lower Limb	Hip to Knee
9		9 – 13			Leg and foot
10		16 – 20		**5:** Trunk and Thorax	Trunk
11		23 – 27			Cardiovascular system
12		30* – 3*			Respiratory system
13	**APRIL**	6 – 9		**Final Review Week**	
–		10		**Study Day**	
Exam Period		13 – 30		**FINAL EXAM (TBD)**	

***January 13:** Add/drop date (no drop fee and the course will not appear on your transcript)
***March 30:** Last day to withdraw from course without academic penalty ('WDN' on transcript)
***April 3:** Good Friday (official holiday)

Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.



Assessment	Value	Date
Unit Quizzes (Top 4)	**20%**	
Quiz 1 (Anatomy Basics)		TBD
Quiz 2 (Nervous System)		
Quiz 3 (Upper Limb)		
Quiz 4 (Lower Limb)		
Quiz 5 (Trunk and Thorax)		
Examinations	**50%**	
Midterm (Units 1-3)	20%	TBD
Final (Units 1-5)	30%	
Participation	**30%**	
Weekly Laboratory Assessments	24%	Weekly (in lab)
PeerWise Participation	6%	Ongoing (due April 9)
Total	**100%**	

Unit Quizzes (20%)

- **Format:** Online; 15 multiple choice questions; 30min; Forward-only.
- **Flexibility**[1]**:**

[1] **Note:** The course instructor may deny academic considerations where flexibility in assessment and/or timeframe for submitting course work is already in place and included on the course syllabus.

    - **Lengthy submission window:** Quizzes open at 12:00pm (noon) and are due at 11:59pm via OWL Brightspace on the dates listed above.
    - **Drop lowest grade:** There are five quizzes in total; however, only the top four scores will be counted, each worth 5%. This allows you to miss one quiz without penalty. This includes any missed quiz, with or without academic considerations.
- **Conditions:** No make-ups or extensions. If more than one quiz is missed without approved academic considerations for all missed quizzes, only the first missed quiz will be dropped and a grade of zero will be assigned to all others. If academic considerations are approved for all missed quizzes, the weight(s) will be redistributed onto the completed quizzes or the final examination. The unit quizzes are flexible assessments that are not eligible for undocumented absences.

Examinations (50%)

- **Midterm examination (20%):**
    - **Format:** On-paper (in-person); 70 multiple choice questions; 2hr.
    - **Content:** All content covered in Unit 1, Unit 2, and Unit 3.
    - **Flexibility[1]:** Not applicable. This assessment has been designated as being central to the assessment of learning outcomes in this course (designated assessment). Accordingly, students must provide documentation for any absence from this evaluation through the academic considerations portal.
    - **Conditions:** Students who miss the midterm examination with documentation and approved academic considerations will have the option to write a make-up examination (TBD) or to have the 20% redistributed to the final examination. A grade of zero will be assigned for a missed midterm examination without approved academic considerations supported by documentation. Academic considerations are not required for the make-up midterm examination – those who do not write it will have the weight of the midterm examination (20%) redistributed to the final examination.
- **Final examination (30%):**
    - **Format:** On-paper (in-person); 70 multiple choice questions; 2hr.
    - **Content:** All content covered in the course (cumulative).
    - **Flexibility[1]:** Not applicable.
    - **Conditions:** Students who miss the final examination with documentation and approved academic considerations may write a make-up examination (date and time TBD). A grade of zero will be assigned for absences without approved academic considerations supported by documentation.

Participation (30%)

- **Weekly Laboratory Assessments (24%)**
    - **Format:** Informal 'bell-ringer' (structural identification and functional anatomy questions); graded for completion (not correctness).
    - **Content:** Topics covered in each week of class.
    - **Flexibility[1]:** You must attend the entire laboratory session and complete the informal bell-ringer assessment to earn 3% each for eight out of the 10 in-person laboratory sessions scheduled throughout the semester (not including the optional in-person midterm and final review sessions). Thus, you may miss two laboratory sessions without penalty. This includes any missed laboratory sessions, with or without academic considerations.
    - **Conditions:** No make-ups or extensions. If more than two sessions are missed without approved academic considerations for all missed laboratory sessions, only the first two missed sessions will be dropped and a grade of zero will be assigned to all others. If academic considerations are approved for all missed sessions, the

weight(s) will be redistributed onto the completed sessions or the final examination. The laboratory component is critical for meeting the learning objectives for the course. Therefore, you must attend and complete at least five laboratory assignments to complete the course. If you miss six or more laboratory sessions (with or without academic considerations), you will be debarred from the final exam and will receive an '**F**' (fail) in the course.

- **PeerWise (6%)**
  - **Format:** Creating at least 10 multiple choice questions (0.2% each, maximum of 2%); answering at least 20 multiple choice questions (0.2% each, maximum of 4%); graded for completion (not correctness).
  - **Content:** Questions written or answered can cover any topic in the course.
  - **Flexibility[1]:** Long completion window (entire duration of the course).
  - **Conditions:** No make-ups or extensions. Not eligible for academic considerations.

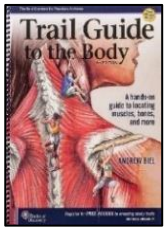
Note: After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within seven days.

Textbook and Other Learning Materials



STRONGLY RECOMMENDED: VB Suite (by Visible Body)

- Use in browser mode or via the app (**Free**).
- **IMPORTANT:** You MUST create your account/log in for the first time using an internet browser (e.g., Safari, Chrome, etc.) while connected to campus Wi-Fi (uwosecure-v2) to gain free access to the content before using the app.



RECOMMENDED: Trail Guide to the Body, 6th ed. Student Workbook (by Books of Discovery)

- Visit OWL Brightspace for course-specific purchasing options (**$50.95 CAD**).
- **RECOMMENDED: YouTube and other publicly available resources**
- Check out YouTube channels like The Noted Anatomist and Ninja Nerd, for help with concepts or browse practice question banks like BlueLink to test yourself!

OPTIONAL: Anatomy.TV

- Available online via the Western University library (similar to VB Suite).

Additional Information

Brightspace

All course information including grades, assignment outlines, deadlines, etc. are available via OWL Brightspace. **Download the Brightspace Pulse App** and enable your notification settings within "Communications" in the top toolbar to stay up-to-date on course communications. Be sure to check the course site regularly for course announcements! If you need assistance, visit OWL Brightspace Help or contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Grading

Any grade appeals on term work must be initiated with the instructor within 3 weeks of the grade being posted. See the University Policy on Undergraduate Student Appeals for more information. The table below outlines University-wide grade descriptors.

Letter grade	Number grade	Description
A+	90-100	One could scarcely expect better from a student at this level

Letter grade	Number grade	Description
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Rounding of Grades (for example, bumping a 79 to 80%): This is a practice that some students request. The final grade documented is the grade that you have achieved. There is no rounding to the next grade level, or 'giving away' of marks. Please don't ask me to do this for you; if any response is given, it will be "please review the course outline where this is presented".

INC (Incomplete Standing): If a student has been approved by the Academic Advising Office (in consultation with the instructor/department) to complete term work at a later date, an INC will be assigned. Students with INC will have their course load in subsequent terms reduced to allow them to complete outstanding course work. Students may request permission from Academic Advising to carry a full course load for the term the incomplete course work is scheduled.

SPC (Special Examination): If a student has been approved by the Academic Advising Office to write a Special Examination and the final exam is the only outstanding course component, an SPC will be assigned. If the class has a makeup exam, the student is expected to write the makeup exam. If the class doesn't have a makeup exam or the student misses the makeup exam for reasons approved by the Academic Advising Office, the student will write the exam the next time the course is offered. Outstanding SPCs will reduce the course load for the term the exam is deferred as outlined in Types of Examinations policy.

Academic Integrity During Online Assessments

All of the quizzes in this course will occur asynchronously online. This means that different people may have access to an assessment at a different time than you do. With this in mind, please remember:

1) You should treat these quizzes like you would a test written in a physical room on campus, with proctors. Online assessments are subject to all of the same university-wide rules, regulations, and penalties as in-person assessments.
2) **These are NOT open book tests. These are NOT group tests. They are INDIVIDUAL tests.** Please complete them as such.
3) You may need to agree to an "Honor Pledge" prior to writing your quiz. Doing so indicates that you understand your responsibility to uphold the integrity of the assessment by not discussing, posting, or sharing information about it until the assessment grades are released. **Note, course assessments are protected, copyrighted material and their content should not be shared or posted to third-party websites under any circumstances.**
4) Please note that failure to comply with this policy may be considered academic misconduct or a breach of the student code of conduct which can carry a range of penalties.

We recognize the value of collaboration and teamwork, and we will offer multiple opportunities throughout the course for you to engage in such activities. Please use the laboratory and review sessions to work as a group and reserve the quizzes, midterm, and final examinations as opportunities to show us what you know and have learned.

Contacting Us

We look forward to meeting you this term and supporting your learning throughout. Here are some tips for connecting with us and getting your questions answered.

Etiquette
Your course coordinator/instructor prefers to be addressed as Dr. McWatt (he/him/his); however, it is acceptable to use the first names of your teaching assistants. If you have a preferred name or pronoun that we get wrong, or if we mispronounce your name, please correct us – we want this to be a welcoming and comfortable space for all.

Email
Emails are permanent professional communications, so be sure to treat them as such! Key components of a professional email include addressing your recipient properly (use their appropriate title and spell their name correctly!), providing a clear and polite request, and signing off with your name and student number. Whenever possible, please use your @uwo.ca email address to avoid spam blocking filters and be sure to note the course code (e.g., KIN 1060, HS 2300, etc.) in the subject line of the email. If you don't hear back from us within 48 weekday hours, please follow up. We do our best to stay on top of communications, but with hundreds of students in the course, this can be tricky at times!

FAQ
What if I have a question about the course or content?

1) Check the **syllabus** and **OWL Brightspace** first – there is likely a note in the syllabus or a course announcement that addresses your question. Plus, this is our contract with you – it should be clear and comprehensive! If your question is not answered somewhere in this document, proceed to the options below.
2) The **discussion page on OWL Brightspace** is probably the best option for getting an answer fast! The instructors, TAs, and other students can all chime in here. Chances are that if you have a question, someone else does too. Posting the question on the discussions page will allow it to be answered publicly, enabling others to benefit from your curiosity.
3) **Email/speak to your Lab TA**. You will be seeing them weekly, and this will allow for quick and easy communication for everyone.
4) **The final option is to email Dr. McWatt**, but this is your main point of contact for questions or concerns that are private or cannot be answered by the preceding options. Remember to be clear and specific with your question/request so that it can be addressed easily.

I've spotted an error!
Check out the error log on the discussions page and let us know what you've found! We are always working to improve the lectures and course site, and we will respond in line there.

I have sensitive information (e.g., academic accommodations) that I need to address!
Please contact Dr. McWatt directly – he will work with you to find solutions to any problems you may encounter. This is a challenging course – please do not feel like you are alone, and please do not hesitate to reach out for help when you need it.

Please be respectful and considerate in all course communications and with all course participants (i.e., instructors, TAs, staff, and other students). Whether it is in person, via email, or on the discussion page, disrespectful and/or abusive language and behaviour will not be tolerated!

Course/University Policies

Support Services

There are various support services around campus and these include, but are not limited to:

1) Academic Support and Engagement - http://academicsupport.uwo.ca
2) Wellness and Well-being - https://www.uwo.ca/health/
3) Registrar's Office -- http://www.registrar.uwo.ca/
4) Ombuds Office -- http://www.uwo.ca/ombuds/

The websites for Registrarial Services (http://www.registrar.uwo.ca), and the same for affiliated university colleges when appropriate, and any appropriate Student Support Services (including the services provided by the USC listed here: http://westernusc.ca/services/) and the Student Development Services, should be provided for easy access.

Students who are in emotional/mental distress should refer to Mental Health@Western (https://www.uwo.ca/health/) for a complete list of options about how to obtain help.

Statement on Gender-Based and Sexual Violence

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at: https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

Student Code of Conduct

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit https://www.uwo.ca/univsec/pdf/board/code.pdf

Absence from Course Commitments

Students must familiarize themselves with the Policy on Academic Consideration – Undergraduate Students in First Entry Programs

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request through the central academic consideration portal (Student Absence Portal). Students are permitted one academic consideration request per course per term **without** supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

Students should also note that the instructor may **designate** one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Academic consideration requests may be denied when flexibility in assessment has already been included. Examples of flexibility in assessment include when there are assessments not required for calculation of the final grade (e.g. 8 out of 10 quizzes), when there

is flexibility in the submission timeframe (e.g. 72 hour no late penalty period), or when timed assessments (e.g., quizzes) are available over an extended period of time (e.g., when you are given a 72 hour time period to start – and finish – the assessment).

Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course syllabus. Supporting documentation for academic considerations for absences due to illness should use the Student Medical Certificate or, where that is not possible, equivalent documentation by a health care practitioner.

Accommodation for Religious Holidays
Students should review the policy for Accommodation for Religious Holidays. Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

Special Examinations
A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examination dates. The Faculty of Health Sciences has set School-specific dates for these Special Examinations. Please speak with your instructor about the date on which the Special Examination for this course will be held.

Academic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Plagiarism
Student work is expected to be original. Plagiarism is a serious academic offence and could lead to a zero on the assignment in question, a zero in this course, or your expulsion from the university. You are plagiarizing if you insert a phrase, sentence or paragraph taken directly from another author without acknowledging that the work belongs to him/her. Similarly, you are plagiarizing if you paraphrase or summarize another author's ideas without acknowledging that the ideas belong to someone else. All papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com (www.turnitin.com).

Use of Artificial Intelligence for the Completion of Course Work
Within this course, you may only use artificial intelligence tools (e.g., "ChatGPT") in ways that are specifically authorized by the course instructor. All submitted work must reflect your own thoughts and independent written work.

Re-submission of Previously Graded Material
Without the explicit written permission of the instructor, you may not submit any academic work for which credit has been obtained previously, or for which credit is being sought, in another course or program of study in the University or elsewhere.

Use of Statistical Pattern Recognition on Multiple Choice Exams
Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Accessibility Statement
Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review The policy on Accommodation for Students with Disabilities

Correspondence Statement
The centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner. Students are further expected to attend to announcements presented through Brightspace, and to read emails generated in this way.

Use of Electronic Devices

During Exams
Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices (e.g., cell phones, tablets, cameras, smart glass, smart watches, or iPods) during ANY tests, quizzes, midterms, examinations, or other in-class evaluations. **These devices MUST either be left at home or with your belongings at the front of the room. They MUST NOT be at your test/exam desk or in your pocket. Any student found with a prohibited device will receive an automatic grade of zero on the test or exam.**

During Lectures and Tutorials
Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class.

Copyright and Audio/Video Recording Statement
Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

Contingency Plan for an In-Person Class Pivoting to 100% Online Learning
In the event of a situation that requires this course to pivot to online content delivery, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times

indicated in the timetable) or asynchronously (e.g., posted on Brightspace for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

Online Proctoring
Tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca.

Appealing a Grade Within this Course
You have the right to appeal any grade within this course. The grounds for a grade appeal may be one or more of: medical or compassionate circumstances, extenuating circumstances beyond the student's control, bias, inaccuracy, or unfairness. All grounds advanced in a request for relief must be supported by a clear and detailed explanation of the reasons for the request together with all supporting documentation.

Appeals generally proceed in this order:
1) Course instructor (informal consultation)
2) Department Chair (submission of written request)
3) The Dean of the Faculty (submission of written request)

In the case of perceived procedural unfairness, steps 2 and 3 are carried out within the Department and Faculty offering the course. In the case of extenuating medical or compassionate circumstances that impact on a grade, steps 2 and 3 are carried out within a student's Home Department and Faculty.

A request for relief against a mark or grade must be initiated with the instructor as soon as possible after the mark is issued. In the event that the instructor is not available to the student, or fails to act, or if the matter is not resolved satisfactorily with the instructor, a written request for relief must be submitted to the Chair of the Department within three weeks of the date that the mark was issued. In the case of a final grade in a course, the written request for relief must be submitted to the Chair of the department by January 31st (for first-term half courses) or June 30th (for second-term half courses or full-year courses).