

# Biology 231: Human Anatomy – Syllabus for Winter 2021

## (1) Course Information

- Section: 2077/LS
- Year and quarter: Winter 2021
- Schedule
  - Live-streamed (synchronous) class meetings (required)
    - Tuesdays and Thursdays, 12:20-2:10pm (I will try to arrive early and stay late)
      - Meet in Zoom using [meeting ID 941 9210 2692 and passcode 231](#)
  - Office hours (optional)
    - Mondays, Wednesdays, and Fridays, 12:20-2:10pm
      - No appointment needed; meet in Zoom (same as above)
    - Other times by appointment
      - Sign up in Starfish as described in the [Introduction to Starfish file](#)
      - Meet in Zoom using [meeting ID 536 606 5089](#) (no passcode needed)
  - Final exam: Thursday, March 18<sup>th</sup>, 12:20-2:10pm, in Canvas

## (2) Instructor Information

- Instructor name: Gregory J. Crowther, Ph.D.
  - Please call me “Professor Crowther” or “Doctor Crowther” or “Doctor C”
  - My pronouns: he/him/his
- Contact information:
  - Email: [gcrowther@everettcc.edu](mailto:gcrowther@everettcc.edu) (Canvas messages work too)
  - Cell phone number: 206-290-8826 (please use sparingly!)
  - [My faculty website](#)
  - Expect responses from me within 24 hours.
- Office on campus: Shuksan 118

## (3) Course Description\*

Detailed examination of the human body, organized by organ system (Integumentary, Skeletal, Muscular, Nervous, Cardiovascular, Lymphatic/Immune, Respiratory, Digestive, Urinary, and Reproductive (including Development)). Primary emphasis on gross anatomy supported by animal dissections (including repeated use of preserved cats) and 3D models, with additional emphasis on cell- and tissue-level anatomy supported by microscope slides and histology images. For allied health professional majors.

## (4) Learning Objectives and Core Learning Outcomes\*

Upon completing this course, students will be able to meet the following Learning Objectives (LOs):

- Describe in detail the gross and microscopic structures of the following human organ systems: Integumentary; Skeletal; Muscular; Central, Peripheral and Autonomic Nervous; Cardiovascular; Lymphatic/Immune; Respiratory; Digestive; Urinary; and Reproductive (including Development).
- Carry out detailed dissections of animal specimens.
- Use a microscope to observe cells and tissues.
- Apply knowledge of anatomy to clinical contexts.
- Use evidence-based learning techniques and technologies to explore core concepts in the biological sciences.

Two of EvCC's three Core Learning Outcomes (CLOs) are assessed in this course:

- *Analytical Thinking.* Students will apply previous knowledge to novel problems, e.g., identifying structures in a cat they haven't seen before or predicting clinical outcomes from anatomical symptoms.
- *Effective Communication.* Students will use the results obtained from experiments, demonstrations and discussions to produce written reports and narratives.

## (5) Required Resources

- A personal schedule that allows you time and energy adequate for this course. I aim to make the course doable on 20 hours per week, but some students report spending much more time than that. Please do not take this course unless it fits into your current life!
- Regular, reliable access to a computer (something better than a phone). If at all possible, pre-arrange for a backup option in case your usual device fails at some point.
- Regular, reliable Internet access. If at all possible, pre-arrange for a backup option in case your usual Internet access fails at some point.
- An account associated with course ID crowther89912 at [Pearson My Lab And Mastering](#). You may purchase an access code via the EvCC bookstore, or you may buy access directly from Pearson My Lab And Mastering (\$94.99 for up to 24 months). If you are not yet sure that you will be taking this course with me, or if you are experiencing temporary financial issues, you can register for free temporary (14-day) access. Your access must include the following:
  - the eText, i.e., the electronic version of our textbook: *Human Anatomy* (9<sup>th</sup> edition/2018) by Martini/Tallitsch/Nath, published by Pearson (ISBN 13: 978-0-13-432076-2; ISBN 10: 0-13-432076-X)
  - textbook-specific practice tests and quizzes
    - Study Area → Practice Tests and Quizzes
  - Learning Catalytics (for "clicker" questions)
    - Course Home → Learning Catalytics
- Lab manual: *Human Anatomy Laboratory Manual with Cat Dissections* (9<sup>th</sup> edition/2020) by Marieb & Smith; published by Pearson (ISBN 13: 978-0-13-516803-5; ISBN 10: 0-13-516803-1)
  - It is possible (though not necessarily recommended) to work with a used lab manual whose Review Sheet pages already include answers. You will need to see what the questions are, but you will turn in your answers electronically.

- When I refer to page numbers, section numbers, figure numbers, and problem numbers, I use those of the current edition. Please do not use an older edition unless you are able to cross-check the older edition against the current one.
- [Course website in Canvas](#)
  - Canvas is your “home base” for the course. All assignments will be listed in Canvas, and you will turn in everything in Canvas (NOT Pearson MyLab And Mastering) except for your Learning Catalytics answers.
  - Please check this site every day or adjust your Canvas settings (Account → Notifications) so that you are notified of all new announcements, assignments, etc.
  - There is no additional charge for using this website.
- Zoom
  - See connection information in section (1) above.
  - All live-streamed sessions will be recorded. You are not required to have your camera or microphone on.
  - There is no charge to you for using Zoom.
- Visible Body website
  - We will use Visible Body for 3D explorations of the body, since their 3D visualizations are much better than those in Pearson My Lab And Mastering.
  - This costs \$50, but you can reduce the price to \$40 with the following discount code (good from Dec. 21 through Jan. 15): EverettWinter
  - To get started, follow the link to [this course invitation](#).
- Access to a human skeleton model (any brand; can be life-size or somewhat small). We will use this for hands-on learning of bones and muscles. I’ve bought a “half-size” model (33.5 inches tall) for about \$50; you can do likewise, or if you can use a model owned by your friend/workplace/etc. for a few assignments, that would be fine too. You will be practicing bone names and bone features, and will be showing positions of muscles with something like modeling clay.
- OPTIONAL, BUT RECOMMENDED: a physical copy of our textbook (listed above). Your access to PearsonMyLabAndMastering.com, which includes the eText, will let you purchase a loose-leaf hole-punched version of the textbook for an additional \$44.99. I recommend getting a hard copy of the textbook either this way or some other way so that you can consult it independently of the Internet, underline things, write notes in the margin, etc.

## (6) Other Requirements and Expectations

### (6.1) Prerequisites\*

- BIOL& 211 (or BIOL& 221 and BIOL& 222) with a grade of C or higher
- CHEM& 121 (or CHEM& 161 and CHEM& 162) with a grade of C or higher

Anyone who has not yet met both prerequisites but wants to take this course should consult me as soon as possible (if you have not already done so).

**(6.2) Attendance and Participation**

Consistent attendance and participation are critical for success – perhaps even moreso in an online course such as this one.

- This class is offered in a synchronous format, also known as live-streaming (LS). You should plan to attend all live-streamed sessions. I understand that there may be occasional emergencies, illnesses, or other temporary problems that prevent you from attending a particular session, and my grading system takes this into account.
- Aside from live-streamed lectures and exams, I hope you will take frequent advantage of opportunities to interact with me and your classmates via office hours, Canvas discussions, study groups, etc.

**(6.3) Assignments**

We learn through regular, focused, thoughtful practice. This course will give you many opportunities to practice working with and processing the material. There will be an assignment due before each online lecture to help keep you moving along through the material. There will also be numerous in-class and in-lab assignments, plus several exams. These different assignments will be graded in different ways:

- Short daily assignments will be graded for completeness (did you do the whole thing?) and timeliness (did you turn it in on time?).
- Exams will be graded for quality (were your answers good?). Exams will include multiple-choice, short-answer, and name-that-structure questions.
- Lab worksheets will be graded for completeness, timeliness, and quality. In general, only a few answers will be checked for quality.

<i>Assignment category</i>	<i>Approximate # of assignments</i>	<i>Points per assignment</i>	<i>Total points in this category</i>
Pre-lecture homework	26 (none dropped)	3 points	78 points
Learning Catalytics (Pearson Mastering)	26 (lowest 4 dropped)	3 points	66 points
Discussion board	7 (none dropped)	3 points	21 points
Lab worksheets	20 (lowest 2 dropped)	8 points	144 points
Tests	6 (lowest 1 dropped)	150 points	750 points
<b>Approximate total</b>			<b>1,059 points</b>

**(6.4) Final Grades**

Final letter grades will be based on the percentage of total points earned, according to the chart below. No “curving” will be applied at the stage of awarding final grades.

- 92.50% to 100%= A
- 89.50% to 92.49% = A-minus

- 86.50% to 89.49% = B-plus
- 82.50% to 86.49% = B
- 79.50% to 82.49% = B-minus
- 76.50% to 79.49% = C-plus
- 72.50% to 72.49% = C
- 69.50% to 72.49% = C-minus
- 66.50% to 69.49% = D-plus
- 59.50% to 66.49% = D
- 0% to 59.49% = F

### **(6.5) Late Work**

Late assignments will be accepted for half credit (e.g., 1.5 points for a 3-point assignment) up until (but not after) the exam to which that assignment applies. Exams themselves may not be taken late.

If you have a great excuse for submitting an assignment late (e.g., sudden illness or family emergency) and want me to consider waiving the late penalty, please post your excuse and documentation (doctor's note, prescription, photo of open wound...) to each corresponding assignment listing in Canvas so that I will see it when I'm grading.

### **(6.6) Academic Integrity – Cheating and Plagiarism**

For tests, working with other students is NOT allowed. For all other assignments, working together IS allowed.

Accidental or intentional use of someone else's work, ideas, research, or writing without attribution of the source may result in a failing grade on the assignment or a failing grade in the course, depending on the details of the situation. Any incidents of this type will be reported to the Dean of Student Development as a violation of the Student Conduct Code, which is described in the [Student Rights and Responsibilities Handbook](#).

### **(6.7) Lab Safety, Cleanliness, and Organization**

All labs this quarter will be done at home. All planned activities should be extremely safe, but please let me know if you have any questions or concerns.

### **(6.8) Other Tips for Success**

- *Actively participate in everything.* Take notes on video lectures. Ask questions. Answer questions, even if you have to guess. Take charge of your education!
- *Practice metacognition.* Metacognition refers to cognition about cognition, i.e., thinking about how you think. For students, this encompasses "knowing how to learn, being able to monitor their own understanding, being reflective about what they understand and do not understand, and being able to strategize about how to resolve their confusions" (K.D. Tanner, *CBE Life Sciences Education* **11**: 113-120, 2012).

- *Work together.* This can be done online in various ways: Canvas Discussions and Chats, Zoom sessions, etc. Form study groups and help each other out! Just be sure that your submitted work reflects your own understanding and credits any outside sources.
- *Respect me and your peers, and expect respect in return.* Respectful behavior includes: listening carefully when spoken to; giving people the time and space to think and to ask and answer questions; refraining from harsh or persistent criticism; avoiding language, attire, or movements likely to be annoying or distracting; keeping conversations reasonably focused on course material; and maintaining reasonable control over one's emotions.
- *Get help when you're starting to struggle, not after weeks of problems.* Let's address small problems – regardless of whether they concern the material itself, study habits, interactions with classmates, or whatever – before they become big problems. Office hours and lab sessions are especially good times to check in with me.

## (7) Approximate Class Schedule

An approximate schedule is posted below. Please note the following:

- I reserve the right to make adjustments for unexpected events such as natural disasters.
- We will cover about two textbook chapters per class session.
- We will skip chapters 12 and 15, but will otherwise cover all textbook chapters in order (1, 2, 3, 4, etc.)

Week # (Dates)	Tuesday	Thursday
1 (Jan. 4-8)	Ch. 1 (introduction)	Ch. 2 (cells), Ch. 3 (tissues/histology)
2 (Jan. 11-15)	Ch. 4 (integument), Ch. 5 (bones)	Ch. 6 (axial skeleton), Ch. 7 (appendicular skeleton)
3 (Jan. 18-22)	Ch. 8 (joints), Ch. 9 (skeletal muscle)	<b>Test 1 (Ch. 1-4; Labs 1, 5, 6)</b>
4 (Jan. 25-29)	Ch. 10 (axial muscles), Ch. 11 (appendicular muscles)	<b>Test 2 (Ch. 5-8; Labs 7-10)</b>
5 (Feb. 1-5)	Ch. 13 (nervous tissue); Ch. 14 (spinal cord & nerves)	Ch. 16 (brain & cranial nerves), Ch. 17 (autonomic NS)
6 (Feb. 8-12)	<b>Test 3 (Ch. 9-11, 13; Labs 11-13)</b>	Ch. 18 (senses), Ch. 19 (endocrine)
7 (Feb. 15-19)	Ch. 20 (blood), Ch. 21 (heart)	Ch. 22 (vessels), Ch. 23 (lymphatic)
8 (Feb. 22-26)	<b>Test 4 (Ch. 14, 16-18; Labs 14-15, 17, 19)</b>	Ch. 24 (respiratory), Ch. 25 (digestive)
9 (Mar. 1-5)	<b>Test 5 (Ch. 19-23; Labs 23-24, 30)</b>	Ch. 26 (urinary), Ch. 27 (reproductive)
10 (Mar. 8-12)	Ch. 28 (development)	<b>Test 6 (Ch. 24-28; Labs 26-29)</b>
11 (Mar. 15-19)	<b>No class (finals week)</b>	<b>"Final Exam" (makeup tests)</b>

## (8) Support for Students: Equity and Accessibility\*

Everett Community College, through its Vision, Mission, and Strategic Plan, has made an institutional commitment to establish a diverse, equitable and inclusive working and learning environment. My goal is to create a classroom environment in which everyone can participate and learn. Because of the

diversity of backgrounds, experiences, and beliefs all of us bring to this class, I expect you to interact with your peers in a spirit of generosity, mutual respect, and understanding.

If there are aspects of this course that prevent you from learning or that exclude you, please speak with me as soon as possible. Together we can develop strategies to meet both your needs and the requirements of this course. I am happy to talk privately after class or during my office hours.

You also have the right to request accommodation for a verified disability. For information and assistance, contact the Center for Disability Services (425-388-9272, or [cds@everettcc.edu](mailto:cds@everettcc.edu)) for help documenting specific needs you may have and determining appropriate accommodations.

*Reasonable Accommodations for Faith/Conscience:* Everett Community College students are entitled to two days of excused absences per academic year (summer quarter through the end of spring quarter) for reasons of faith or conscience or for organized activities conducted under the auspices of a religious denomination, church, or religious organization. Everett Community College will grant reasonable accommodation so that grades are not impacted for students who are absent for reasons of faith or conscience, or for an organized activity conducted under the auspices of a religious denomination, church, or religious organization. Such absences must be requested in writing within the first two weeks of the class or the first week for a late start class and may not incur additional fees for students. This policy and the associated procedure is posted on the [Student Rights & Responsibilities Handbook](#). Students who have concerns about approval or a grade impact may utilize the student grievance procedure for concerns not directly related to grades, or to the grade appeal process in cases impacting a final grade.

We understand that for our campus to be welcoming and safe, it must be free from all forms of discrimination. Everett Community College does not discriminate based on, but not limited to, race, religion, creed, color, national origin, age, sex, sexual orientation, gender identity or expression, pregnancy or parental status, marital status, disability, genetic information, or status as a veteran of war. If you believe that you have been subjected to discrimination or harassment based upon any of these, you should let me know or contact the college's Title IX Coordinator at [TitleIXCoordinator@everettcc.edu](mailto:TitleIXCoordinator@everettcc.edu) or 425-388-9271.

Additional student support information:

- *Canvas and eLearning.* Assistance with the Canvas learning management system (including logging in and course access).
  - EvCC's [eLearning web page](#)
  - Phone: 425-388-9027 or 1-866-575-9027
- *Counseling and Student Success.* Assistance with career counseling, academic/educational counseling, advising, and referral to community mental health resources.
  - EvCC's [Counseling & Student Success web page](#)
  - Phone: 425-388-9263

- *Library Media Center.* Information and services to support research and learning including books, media materials, and databases. Librarians assist students in locating information and developing research skills.
  - EvCC's [Library Media Center web page](#)
  - Phone: 425-388-9353 (checkout) and 425-388-9354 (reference assistance)
- *TRiO.* Eligible students benefit from services such as academic planning, transfer assistance, and small-group tutoring. Students must be a first-generation college student (neither parent graduated with a 4-year bachelor's degree), low-income (as determined by federal guidelines, verification required), or have a documented disability.
  - EvCC's [TRiO web page](#)
  - Phone: 425-388-9365 (call) or 425-382-8565 (text)
- *Tutoring Center.* Free academic/tutorial support with course material, study skills, time management, and preparation for exams.
  - EvCC's [Tutoring Center web page](#)
  - Phone: 425-388-9356
- *Writing Center.* Peer writing assistants offer feedback, ideas, and methods for editing and polishing work.
  - EvCC's [Writing Center web page](#)
  - Phone: 425-388-9406
- *Additional Support Services.*
  - EvCC's [Student Services web page](#)

## **(9) General Information about EvCC Policies and Procedures\***

As outlined in the [campus civility statement](#), Everett Community College is committed to providing a safe learning and working environment. The expectation is that all students will conduct themselves in a civil, respectable and appropriate manner as a responsible member of the college community. [The Student Rights and Responsibilities Handbook](#) identifies and describes college expectations, students' rights, and outlines the process for resolving disciplinary matters, including Student Code of Conduct violations. The provisions of the Student Code of Conduct apply to all students whenever they are on the college campus, in college housing, or engaged in college-sponsored activities and functions.

### **(9.1) Emergency Preparedness and Campus Closures\***

In the event of an emergency situation adversely affecting college operations, public health, or the well-being and safety of students or employees, the college president may declare a temporary closure of any or all units of the institution. If the event of a closure, information will be posted on the opening screen of the EvCC website, emailed to students and employees at their college email address, and will also be available as a message on the college's main phone line at 425-388-9100. Students may sign up to receive an emergency alert as a text message or by personal email [through the Rave system](#). Faculty will communicate with students about adjustments in course content or requirements, including assignment deadlines that may be impacted by a closure.



**(9.2) Academic Calendar\***

Registration and payment dates, application and refund deadlines, the final examination schedule and all other information related to the academic year and each individual quarter is available on the [college website](#).