Biological Sciences: General Biology, Ecology, Pre-Health Professions Concentrations

Biochemistry & Molecular Biology: Biology Concentration

Bioinformatics

Travis Wakeham
Meet your academic advisor!

- Travis Wakeham
- Pronouns: He/Him/His
- E-mail: twakeham@mtu.edu
- Office: Dow 738
- Phone: (906) 487-3435
Academic Advisor’s role:

- Advising Syllabus – use as a guide + checklist for advising
- Assist students with:
  - Developing an academic plan
  - Course scheduling + registration
  - Understanding University policies and procedures
  - Locating and using resources on campus
  - Seeking opportunities: research, community engagement, study abroad, internships, scholarships, etc.
  - Envisioning, fostering, and realizing their goals here at Michigan Tech and for a lifetime
Academic Advisor’s role:

• Primary contact for any questions or concerns
  • Can help refer you to the specialists you need if I’m not the right resource!

• **When faced with a difficult questions or challenging situation, your academic advisor is always a good place to begin!**
Be prepared for an advising meeting

• Know your M number – located on your Tech ID
• Bring any previously marked-up notes, forms, etc.
  • Take notes during advising meetings
  • Create a maintain a personal academic records folder
• Plan to meet with me at least once a semester, before course registration
• Schedule a meeting with me through Google Calendar or attend walk-in advising hours
Google Calendar for advising meeting

• Go to Google Calendar
• Log in with your Michigan Tech account
• Click “+ Create”
  • Add Guests: add twakeham@mtu.edu
    • Use “See guest availability” or “Suggested times” to find a time that is free
  • Please describe the reason for meeting in the event description, so I can prepare materials ahead of time
  • Please allow 1-2 business days notice. I may not be able to honor appointments made the day of or night before.
  • I will accept the meeting or e-mail you to reschedule!
Advising Checklist

- Login to MyMichiganTech and review your transcript
- Meet your academic advisor
- Complete class registration and print class schedule
- Explore Campus Resources
  - Your Department + Advisor
  - Undergraduate Catalog
  - Dean of Students
  - Registrar’s Office
  - Library
  - Counseling Services & Wellness
General Education Requirements

Travis Wakeham
University Learning Goals

1. Disciplinary Knowledge
2. Knowledge of the Physical and Natural World
3. Global Literacy
4. Critical and Creative Thinking
5. Written & Oral Communication
6. Information Literacy
7. Technology
8. Social Responsibility and Ethical Reasoning
General Education Requirements

- UN 1015: Composition 3 credits
- UN 1025: Global Issues* 3 credits
  - or 3000-level language course
- Critical & Creative Thinking 3 credits
- Social Responsibility & Ethical Reasoning 3 credits
- Humanities, Arts, & Social Sciences (HASS) 12 credits
- Co-Curricular Activities 3 units
  - counted towards semester credit total, but not counted in total credits required for a degree (but **must** be completed to graduate)
UN 1015 + UN 1025

- Make it a priority to take each during your first year or this upcoming summer
- Both a pre-requisites for all 3000-level HASS courses
- Modern Language Option:
  - Take a placement test if you have any experience in a language (French, German, Spanish) – you may earn placement credit!
  - Placement Test + Open | Today, 3:30 – 5:00 PM | Walker 120A
  - Language courses could also count as HASS or free electives, but check with your advisor to confirm
Critical and Creative Thinking

- Art Appreciation
- Music Appreciation
- Sound in Art and Science
- Theatre Appreciation
- Introduction to Rhetoric
- Introduction to Film
- American Experience in Literature
- Introduction to Literature
- British Experience in Literature
- Introduction to Philosophy
- Communication and Culture
- Language and Mind
- Environment and Society
- *Transfer Agreement credit*
Social Responsibility and Ethical Reasoning

- Principles of Economics
- Issues in American Education
- Intro to Psychology
- Intro to Cultural Anthropology
- Intro to Archaeology
- Intro to Human Geography
- US History to 1877
- US History since 1877
- European History to 1650
- European History since 1650
- World History to 1500
- World History since 1500
- American Government and Politics
- Intro to Law and Society
- Intro to Sociology
- Transfer Agreement credit
Humanities, Arts, and Social Sciences (HASS)

- Students must take a minimum of 12 credits in HASS
  - 3 credits from Communication and Composition list
  - 3 credits from Humanities and Fine Arts list
  - 3 credits from Social and Behavioral Sciences list
  - 3 credits from any list above or restricted HASS list
- 6 credits must be 3000-level or above
- *Some courses are on multiple lists, but each course can only satisfy one requirement!*
Co-curricular Activities

• Students complete a minimum of 3 units
• Most re 0.5 units and last 7 weeks (half semester)
• *Not included in the GPA or overall credits required for degree*
• Some examples
  • ROTC, Varsity Sports, Intramurals, Club Sports, Huskies Pep Band, Campus Concert Band, Private Music Instruction, Ultimate Frisbee, Bowling, Golf, Social Dance, Hiking, Fitness Training, Snowboarding, Broomball, etc.
### Major Requirements: 63-65 Credits

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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<td>BI 1020</td>
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<tr>
<td>BI 1050</td>
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<td>BI 1070</td>
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<tr>
<td>BI 1080</td>
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<td>BI 1090</td>
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<td>BI 1100</td>
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<td>BI 1150</td>
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<td>BI 1230</td>
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<td>BI 1250</td>
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<td>BI 2010</td>
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### Concentration Requirements: 18-20 Credits

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<td>BI 2040 or</td>
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<td>BI 4040</td>
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### Biology Elective Requirement: 3-5 Credits

- BI 2530
- BI 2550
- BI 3560
- BI 3570
- BI 4530

### Chemistry Requirements: 19 Credits

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### Mathematics Requirements: 7 Credits

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### Physics Requirements: 8 Credits

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<tr>
<td>PH 1290</td>
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### Credit Subtotal: 63-65 Credits

### General Education Requirements: 24 Credits

**Core: 12 Credits**

- UN 1005
- UN 1225 or upper-level modern language
- Critical Thinking
- Social Responsibility
- Ethics

**HASS: 12 Credits**

- 12 credits must be from HASS courses
- At least two credits must be from three disciplines

### Credit Subtotal: 24 Credits

### Free Electives: 12-14 Credits

### Co-Curricular Activities: 3 Credits

### Advisor Use Only

- Total Credits Required: 120
- Total Credits Completed: 120
- Total Credits Needed: 0
Biological Sciences - Pre-Professional Concentration (Biochemistry Focus)

Fall Year 1
- SL 1018 (4 cr) General Biology I (Includes lab)
- SL 1019 (4 cr) General Biology II (Includes lab)
- CH 1130 (4 cr) General Chemistry I

Spring Year 1
- SL 2188 (3 cr) Principles of Biochemistry
- SL 2301 (3 cr) Genetics

Fall Year 2
- SL 3218 (3 cr) General Microbiology (Includes lab)
- SL 3219 (3 cr) General Physiology

Spring Year 2
- SL 2312 (3 cr) General Cell Biology

Fall Year 3
- SL 3219 (3 cr) General Physiology
- SL 3203 (3 cr) Biochemistry

Spring Year 3
- SL 3202 (3 cr) Biochemistry

Fall Year 4
- SL 3006 (3 cr) Biochemistry
- SL 3017 (3 cr) Biochemistry Seminar

Spring Year 4
- SL 3506 (3 cr) Biochemistry Seminar
- SL 3517 (3 cr) Biochemistry Seminar

Free Electives (15-16 cr)

Academic Credits
Total Credits: 17 (15 cr)
Suggested Course Guide: Biochemistry and Molecular Biology, Biology Focus

**Year 1**
- Fall: BL 1618 (4 cr) General Biology 1
- Spring: BL 1628 (4 cr) General Biology 2

**Year 2**
- Fall: BL 2190 (3 cr) Introduction to Biochemistry
- Spring: BL 2208 (3 cr) General Chemistry 2

**Year 3**
- Fall: BL 2810 (4 cr) Genetics/Molecular Biology
- Spring: BL 3872 (3 cr) Biochemistry II

**Year 4**
- Fall: BL 4916 (3 cr) Clinical Lab
- Spring: BL 4500 (3 cr) Molecular Biology Techniques

**Other Courses**
- MA 2115 (3 cr) Biochemistry
- MA 2111 (3 cr) General Physiology
- MA 2113 (3 cr) Molecular Biology
- MA 2114 (3 cr) Cellular and Molecular Biology

**Academic Credits**
- Total Credits: 17-18
- 16.5 credits per year

**Orientation 2019 Advising Meeting**
8/26/19
uAchieve Interactive Degree Audit

Your audit shows what you still need to complete in order to graduate. As requirements are marked off, they will turn green. Incomplete areas are shown in red.
uAchieve Interactive Degree Audit

Completed courses and grades will appear in blue.

Requirements that are not yet met will show below. Click on them for more information about the course!
Registration

Travis Wakeham
Math Placement & Requirements

• Starting math course is based on your math ACT or SAT score, AP credit, college transfer credit, or ALEKS score

• Biological Sciences majors:
  • MA 1135: Calculus for Life Sciences (4 credits)

• Biochemistry & Molecular Biology + Bioinformatics majors:
  • MA 1160: Calculus with Technology I (4 credits)
  • MA 1161: Calculus Plus with Technology (5 credits)
Chemistry Placement & Requirements

• Starting chemistry course is based on major and math scores
  • Students who have difficulty in introductory chemistry courses generally have weak math skills or have not taken chemistry for several years
  • Optional placement test during O-Week + 1st week of classes

• All majors I advise:
  • CH 1150: University Chemistry 1 Lecture
  • CH 1151: University Chemistry 1 Lab
  • CH 1153: University Chemistry 1 Recitation
Preparing for Registration

• Registration Tutorial

• Registrar’s website contains information, such as:
  • Evening Exam Schedules
  • Final Exam Schedule
  • Academic Calendar
  • GPA Estimator
  • Course Descriptions
  • Schedule of Classes
  • …and more!
First-Year Students: Adding / Dropping

- During O-Week + Week 1
  - See me or the Registrar's Office for changes
- After Week 1:
  - Fill out orange slip with me
  - Instructor signature will be required to add a course
  - Instructor signature also required to drop a course after Week 3
Important Dates for Fall 2019

- **Friday, Sept 6**: Last day to add a full semester class
- **Wednesday, Sept 11**: Last day to drop a full semester class with a refund
- **Friday, Sept 20**: Last day to drop a full semester class without a grade
- **Sunday, Oct. 27**: Spring Course Registration Opens
- **Friday, Nov. 08**: Last day to drop a full semester course with a “W” grade
  - After 5:00 PM, you cannot drop a full-semester class without extenuating circumstances. Late drops are not approved strictly to avoid poor grades.
If things don’t go well...

• Talk with me
• Attend your instructor’s office hours
• Use Learning Centers + Wahtera Student Success Center
  • Set-up a weekly appointment
• Re-evaluate how you manage your time
  • Be involved, but don’t overwhelm yourself
  • Get enough sleep! 7-8 hours per night
• Repeat courses lower than a C as soon as possible
  • There may be consequences with financial aid due to repeated coursework, so contact that office to discuss your status and options!