Introduction to Parasitology

Prerequisite: Bio 212

Recommended text: Gerald D. Schmidt and Larry S. Roberts’ Foundations of Parasitology; Roberts and Janovy; McGraw Hill

Course Description: Parasitology is the study of parasitic organisms and relationships with their hosts. In this course we will study examples of important parasites of humans and animals. There will be an emphasis on parasites of medical importance. We will discuss techniques of parasite identification. The lectures will be based around taxonomy of parasites focusing on major groups of parasites their morphology, their lifecycles, and how they affect the host.

Student written report: 2-3 pages on a parasite based on 2 primary research articles. Articles should be chosen (and approved) by February 4th. An initial outline is due by March 13th and the final paper is due April 10th.

Student presentations: 5-10 minute presentation on a particular parasite and host relationship. We will have some presentations during the course beginning on Jan, 27th. The second to the last day is reserved to finish the presentations.

Disability Statement: If you have a disability and require accommodations, please contact the instructor early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the Disability Resources (DR) office, located on the main floor of the Student Services Building, Rm 1076, 515-294-6624.

Lecture Topic:

1) Jan. 13th Introduction Parasitology Chapters: 1,2,3 Jones
2) Jan. 15th Protozoa – Intro Ch. 4, 5 Jones
3) Jan. 20th Protozoa – Kinetoplasts cont. Ch. 6 Jones
4) Jan 22nd Protozoa – Ameba Ch. 7 Jones
5) Jan. 27th Protozoa - Apicomplexa Ch.8 Brewer
6) Jan. 29th Protozoa - Apicomplexa Ch.9 Brewer
7) Feb. 3rd Protozoa - Celiophora, Microsporidia, Myxozoa Ch. 10, 11 Brewer
8) Feb. 5th EXAM 1
9) Feb. 10th Helminths - Intro Ch. 12, 13 Brewer
10) Feb. 12th Helminths – Aspido, Monogenea Ch. 14, 19 Brewer
11) Feb. 17th Helminths – Digenea Ch. 15, 16 Prince
12) Feb. 19th Helminths – Digenea Ch. 17, 18 Prince
13) Feb. 24th Helminths – Cestodes Ch. 20, 21 Brewer
14) Feb. 26th Helminths – Cestodes Ch. 20, 21 Brewer
15) March 3rd EXAM 2
16) Mar. 5th Helminths – Intro: Nematodes Ch. 22, 23 Jones
17) Mar. 10th Helminths – Nematodes Ch. 24, 25 Beetham
18) Mar. 12th Helminths – Nematodes Ch. 26,27 Beetham
19) Mar. 17th Spring Break
20) Mar. 19th Spring Break
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar. 24th</td>
<td>Helminths – Nematodes</td>
<td>Ch. 28, 29 Jones</td>
</tr>
<tr>
<td>Mar. 26th</td>
<td>Helminths – Miscellaneous</td>
<td>Ch. 30, 31, 32 Jones</td>
</tr>
<tr>
<td>March 31st</td>
<td>EXAM 3</td>
<td></td>
</tr>
<tr>
<td>Apr. 2nd</td>
<td>Arthropods – Intro, Crustacea</td>
<td>Ch. 33, 34 Brewer</td>
</tr>
<tr>
<td>Apr. 7th</td>
<td>Arthropods – Pentastomes, Lice</td>
<td>Ch. 35, 36 Brewer</td>
</tr>
<tr>
<td>Apr. 9th</td>
<td>Arthropods – bugs, fleas</td>
<td>Ch. 37, 38 Brewer</td>
</tr>
<tr>
<td>Apr. 14th</td>
<td>Arthropods – Flies</td>
<td>Ch. 39 Jones</td>
</tr>
<tr>
<td>Apr. 16th</td>
<td>Arthropods – Ticks, Mites</td>
<td>Ch. 41 Jones</td>
</tr>
<tr>
<td>Apr. 21st</td>
<td>Arthropods – Ticks, Mites</td>
<td>Ch. 41 Jones</td>
</tr>
<tr>
<td>Apr. 23rd</td>
<td>Exam 4</td>
<td></td>
</tr>
<tr>
<td>Apr. 28th</td>
<td>student presentations</td>
<td></td>
</tr>
<tr>
<td>Apr. 30th</td>
<td>Presentations/Review</td>
<td></td>
</tr>
</tbody>
</table>

Points:

- Student written report: 10% (100)
- Student presentation: 10% (100)
- Four exams: 40% (400)
- One final: 30% (300)
- Quizzes: 10% (100)