Medieval and Early Modern Studies

[College of Letters and Science]

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Sally McKee, Ph.D. (History)
Baki Tzeccan, Ph.D. (History/Religious Studies)

The Major Program

The major in Medieval and Early Modern Studies examines the intellectual, political, and cultural forces that shaped modern European civilization during the period from the end of Ancient Rome (fifth century) to the beginning of the Enlightenment (mid-eighteenth century). An interdisciplinary and interdepartmental program, the major includes studies in history, art history, philosophy, literature, drama, music, national languages, religion, rhetoric, and political theory.

The Program.

The major requires interdisciplinary work, while allowing the student to focus on the early Middle Ages, the High Middle Ages, the Renaissance, or the Baroque. The series of medieval and early modern courses in the program provides the foundation for the major and prepares students for advanced work within the individual disciplines. On the upper-division level, students may choose course work in specific areas of History, Comparative Literature, English, French, German, Italian, Spanish, and Latin; philosophy and religion, arts and language, and political thought. In addition, each student may elect to complete a senior thesis on a selected aspect of medieval and/or early modern culture.

Career Alternatives.

The major in Medieval and Early Modern Studies is a liberal arts degree providing excellent preparation for the rigors of professional schools as well as careers in law, museology, journalism, and teaching.

Medieval and Early Modern Studies

A.B. Major Requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory Subject Matter</td>
<td>22</td>
</tr>
<tr>
<td>Medieval Studies</td>
<td>208</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medieval Studies</td>
<td>130A, 130B</td>
</tr>
<tr>
<td>Special Themes in Medieval Cultures</td>
<td>44</td>
</tr>
</tbody>
</table>

Medieval Studies 130A, 130B, 131, 139, 190
Music 121A, 124A, 124B
Philosophy 105, 145, 168, 170, 172
Political Science 115, 116, 118A
Religious Studies 102, 115, 130
Spanish 130, 133N, 134A, 134B, 142

Total Units for the Major | 66

* Prior approval by Undergraduate Adviser necessary.

Major Adviser: See Program office.

Minor Program Requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medieval and Early Modern Studies</td>
<td>24</td>
</tr>
</tbody>
</table>

The minor in Medieval and Early Modern Studies is a coherent program of interdisciplinary study. Medieval and early modern courses may be chosen in any of the traditional fields of concentration, including art, history, literature, music, national languages, philosophy, political theory, and religious studies. Courses must be upper-division with at least two courses each from the medieval and early modern periods. Students may also select a minor with a thematic emphasis.

Although there is no foreign language requirement for the minor, knowledge of Latin or a modern European language is recommended. The minor must be designed in consultation with the Undergraduate Adviser.

Minor Adviser: See Program office.

Courses in Medieval Studies (MST)

<table>
<thead>
<tr>
<th>Lower Division</th>
<th>20A. Early Medieval Culture</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>3 hours; discussion</td>
<td>1 hour; extensive writing</td>
</tr>
<tr>
<td>Readings (in translation)</td>
<td>medieval culture, such as Codes of Justinian, Confessions of Saint Augustine, Beowulf, the Nibelungenlied, The Song of Roland, the Summa Theologiae of Thomas Aquinas, the Chronicles of Froissart, Chaucer's Canterbury Tales, and Dante’s Divine Comedy</td>
<td></td>
</tr>
<tr>
<td>GE credit:</td>
<td>ArtHum, Writ</td>
<td>AH, WC, WE—I. [I]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>98. Directed Group Study</th>
<th>1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>3 hours; discussion</td>
</tr>
<tr>
<td>Great transformations that created the modern world: Constitutional Government, the Hundred Years War, the Black Death, and the Peasants Revolts, the Renaissance, Reformation and Counter-Reformation, and the Baroque</td>
<td></td>
</tr>
<tr>
<td>GE credit:</td>
<td>ArtHum, Writ</td>
</tr>
</tbody>
</table>

| 130. Special Themes in Renaissance Culture | 4 |
| Lecture | 3 hours; discussion | 1 hour |
| Each theme illuminates an interdisciplinary aspect of Renaissance culture in the eastern and western hemispheres |

<table>
<thead>
<tr>
<th>Department</th>
<th>98. Directed Group Study</th>
<th>1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM</td>
<td>130. Special Themes in Medieval Culture</td>
<td>4</td>
</tr>
<tr>
<td>Lecture</td>
<td>3 hours; discussion</td>
<td>1 hour</td>
</tr>
<tr>
<td>Each offering concentrates on an interdisciplinary aspect of medieval culture in the Middle East and Europe: the idea of the hero, mysticism, urban development</td>
<td></td>
<td></td>
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<tr>
<td>Extensive readings focused on medieval source material</td>
<td></td>
<td></td>
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<tr>
<td>May be repeated for credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE credit:</td>
<td>ArtHum, Writ</td>
<td>AH, WC, WE—II. [I]</td>
</tr>
</tbody>
</table>

Quarter Offered.

Fall 2011 and on Revised General Education (GE): AH—Arts and Humanities; SE—Science and Engineering; SS—Social Sciences; Div—Domestic Diversity; Writ—Writing Experience

See Medicine and Epidemiology (VME), on page 539.
Microbiology and Molecular Genetics

Formerly Microbiology
(University of California at Berkeley)

Woll-Dietrich Heyer, Ph.D., Chairperson of the Department

Department Office: 357 Briggs Hall
530-752-2626; http://microbiology.ucdavis.edu

Faculty
Primary Department Members
Scott C. Dawson, Ph.D., Associate Professor
Woll-Dietrich Heyer, Ph.D., Professor
Neel Hunter, Ph.D., Professor Emeritus
Michele M. Igo, Ph.D., Professor
Stephen C. Kowalczykowski, Ph.D., Distinguished Professor
Sui-Li Lin, Ph.D., Associate Professor
John C. Meeks, Ph.D., Research Professor
Lorena Navarro, Ph.D., Assistant Professor
Douglas C. Nelson, Ph.D., Professor
Rebecca Paradies, Ph.D., Professor
Martin L. Privalsky, Ph.D., Distinguished Professor
John R. Roth, Ph.D., Distinguished Professor
Kazuhiko Shizaki, Ph.D., Adjunct Professor
Mitchell H. Singer, Ph.D., Professor
Valley J. Stewart, Ph.D., Professor
Lifeng Xu, Ph.D., Assistant Professor

Secondary Department Members
Sean Burgess, Ph.D., Professor
Jodi Nummi, Ph.D., Professor
Ted Powers, Ph.D., Professor

Emeriti Faculty
Stanley W. Arzt, Ph.D., Emeritus Professor Emeritus
Paul Baumann, Ph.D., Emeritus Professor Emeritus
John L. Ingraham, Ph.D., Emeritus Professor Emeritus
Jaume S. M. Manning, Ph.D., Emeritus Professor
David Pratt, Ph.D., Emeritus Professor
Chester W. Price, Ph.D., Emeritus Professor
Merna R. Villarejo, Ph.D., Emeritus Professor Emeritus
Mark L. Wheelis, Ph.D., Emeritus Professor Emeritus

Aaffiliated Faculty
Eric D. Mann, Ph.D., Lecturer

The Major Program
Microbiology is the branch of biology that deals with bacteria, yeasts and other fungi, algae, protozoa, and viruses. These microorganisms are ubiquitous in nature and play a crucial role in areas such as agriculture, biotechnology, ecology, medicine, and veterinary science. The field of microbiology contributes to areas of fundamental inquiry such as biochemistry, cell biology, evolution, genetics, molecular biology, pathology, and physiology. The ease and power of simultaneous genetic and biochemical analysis of microbes led to the emergence of the new disciplines of molecular biology and molecular genetics, and spawned the new industry of biotechnology.

The Program. The Microbiology Undergraduate Program offers Bachelor of Science and Bachelor of Arts degrees in the College of Biological Sciences. Both degrees are designed to provide students with quantitative skills and knowledge across the breadth of Biological Sciences, while maintaining a focus on the biology of microorganisms. The B.S. degree offers more training in mathematics, biochemistry, and laboratory methodology; the B.A. degree incorporates more exposure to the liberal arts. The choice of a major program and its suitability for particular career options should be discussed with a major advisor.

Career Alternatives. A bachelor’s degree in microbiology serves as the foundation for advanced study in microbiology, entry into the professional schools of all health sciences, or immediate employment in biotechnology, health care and food science industries.

A.B. Major Requirements:

Preparatory Subject Matter..............44-56
Biological Sciences 2A/2B-2C..................14
Chemistry 2A/2B.................................10
Chemistry 8A/8B or 118A-118B.............6-12
Mathematics 17A-17B or 21A-21B.............8
Physics 1A-1B or 2A-2B-2C..................6-12

Depth Subject Matter......................36
Biological Sciences 101, 105
(102+103)........................................7-10
Microbiology 104, 104L, 105, 105L......13
Select at least one course from each of the areas of study below.

Areas of Study:
1. Molecular Microbiology: Microbiology
   115, 150, 170 ....................................3
2. Medical Microbiology: Microbiology
   162, Medical Microbiology and Immunology 188, Pathology,
   Microbiology and Immunology 126,
   128 ....................................................3-4

Restricted electives..........................6-10
Select from:
Upper division Microbiology courses not used in satisfaction of any other requirement; or Biological Sciences 104, 181, 183; Food Science and Technology 104, Molecular Cellular Biology 120L, 121, 160L, 182, Plant Pathology 120, 130, 148, 150; Plant Sciences 174, Pathology Microbiology and Immunology 126L, 127, Soil Science 111

Note: Although a course may be listed in more than one category, that course may satisfy only one requirement in the entire major.

Total Units for the Major..................80-92

B.S. Major Requirements:

Preparatory Subject Matter...............55-65
Biological Sciences 2A/2B-2C..............14
Chemistry 2A/2B-2C ............................15
Chemistry 8A/8B or 118A-118B.............6-12
Mathematics 17A-17B-17C or 21A-21B (21C recommended)....8-12
Physics 7A-7B-7C.................................12
Microbiology 91 or 191........................1

Areas of Study:
1. Molecular Microbiology: Microbiology
   115, 150, 170 ....................................3
2. Medical Microbiology: Microbiology
   162, Medical Microbiology and Immunology 188, Pathology,
   Microbiology and Immunology 126,
   128 ....................................................3-4

Restricted electives..........................6-10
Select from:
Upper division Microbiology courses not used in satisfaction of any other requirement; or Biological Sciences 101, 102, 104, 105, 105L......13
Select at least one course from each of the areas of study below.

Total Units for the Major..................80-92

Meteorology

See Atmospheric Science, on page 173.

Mexican-American (Chicano) Studies

See Chicana/Chicano Studies, on page 192.

Microbiology

See Microbiology and Molecular Genetics, on page 443; Medical Microbiology (MMI), on page 410; Microbiology (A Graduate Group), on page 423; and Pathology, Microbiology, and Immunology (PMI), on page 540.