# Course Approval Form

**Action Requested:**
- [x] Create new course
- [ ] Inactivate existing course
- [ ] Modify existing course

**Repeat Status:**
- [ ] Not Repeatable (NR)
- [ ] Repeatable within degree (RD)
- [ ] Repeatable within term (RT)

**Grade Type:**
- [ ] Undergraduate
- [x] Graduate

**College/School:**
COS

**Department:**
BMED

**Subject Code:**
BMED

**Number:**
550

**Effective Term:**
- [x] Spring
- [ ] Year 2016
- [ ] Summer

**Title:**
Special Topics in Biomedicine

**Credits:**
- [x] Fixed
- [ ] Variable

**Repeat Status:**
- [x] Not Repeatable (NR)
- [ ] Repeatable within degree (RD)
- [ ] Repeatable within term (RT)

**Maximum credits allowed:**
2

**Grade Mode:**
- [x] Regular (A, B, C, etc.)
- [ ] Satisfactory/No Credit
- [ ] Special (A, B C, etc. +IP)

**Schedule Type:**
- [x] Lecture (LEC)
- [ ] Lab (LAB)
- [ ] Recitation (RCT)
- [x] Internship (INT)

**Prerequisite(s):**
Successful completion of first semester of the ABS Certificate curriculum (Biochemistry, Biostatistics, Histology)

**Corequisite(s):**
Spring ABS Certificate courses (Human Anatomy, Human Physiology)

**Restrictions Enforced by System:**
Restricted to ABS Certificate Students (CERG-ABS) and by invitation from the BMED director only.

**Instructional Mode:**
- [x] 100% face-to-face
- [ ] Hybrid: ≤ 50% electronically delivered
- [ ] 100% electronically delivered

**Equivalencies:**
- [ ] YES, course is 100% equivalent to:
- [ ] YES, course is being renumbered to/will replace the following:

**Description**
This course presents various topics in biomedicine in a lecture/seminar format. Students build on the ABS Certificate curriculum to enhance their understanding of biomedical issues and better prepare for careers in the health professions.

**Catalog Copy for NEW Courses Only**
(Consult University Catalog for models)

**Notes**
(List additional information for the course)

**Approval Signatures**

**For Graduate Courses Only**

**For Registrar Office’s Use Only:**
Banner
Catalog

revised 6/22/15
Course Proposal Submitted to the College of Science Curriculum Committee (COSCC)

The form above is processed by the Office of the University Registrar. This second page is for the COSCC’s reference. Please complete the applicable portions of this page to clearly communicate what the form above is requesting.

FOR ALL COURSES (required)
Course Number and Title:

BMED 550 Special Topics in Biomedicine

Date of Departmental Approval:

FOR INACTIVATED/REINSTATED COURSES (required if inactivating/reinstating a course)
• Reason for Inactivating/Reinstating:

FOR MODIFIED COURSES (required if modifying a course)
• Summary of the Modification:
  • Text before Modification (title, repeat status, catalog description, etc.): 
  • Text after Modification (title, repeat status, catalog description, etc.): 
  • Reason for the Modification:

FOR NEW COURSES (required if creating a new course)
• Reason for the New Course:
This course is being created to better serve the ABS Certificate students. Previously BIOL 591 Special Topics was used to accommodate invited ABS students but confusion in scheduling and reporting suggests that a new course within the BMED program is a better approach.
  • Relationship to Existing Programs:
The proposed course will serve as an elective made available to top performers in the ABS Certificate by invitation of the instructor.
  • Relationship to Existing Courses:
This is an elective course that assumes successful completion of the Fall ABS Curriculum. It does not replace any ABS course but, rather, offers additional material to students performing in the top quartile of the Certificate.
  • Semester of Initial Offering:
  Spring, 2016
  • Proposed Instructors:
  William Hahn
  • Insert Tentative Syllabus Below
Description

This course offers a graduate-level exploration of the evolutionary principles behind human diversity with particular reference to human health. Concepts such as natural selection, genetic drift, molecular evolution, coevolution, life history theory, sexual selection, evolutionary developmental biology and evolutionary ethics will be presented as a framework for understanding human anatomy, physiology, nutrition, metabolism, reproduction, disease response, stress, and behavior. Each class session will consist of approximately one half lecture and one half discussion or paper presentation.

Texts

Primary (required):


Secondary (optional):


The primary texts are used as a core reference for the course and should be followed closely. Lectures will make direct use of content from Gluckman, et al. (2009) and Perlman (2013). Student presentations will be taken from individual chapters selected by the student in Trevathan, et al. (2008). Additional chapters from other texts and as assigned will be listed accordingly.

Grading

There are two exams, a comprehensive final, and one student-led presentation/report for this class. Each exam counts 25% toward your final grade. There are no make-up exams. If you have documented proof that you missed the exam because you were ill or injured, your final exam will count 50%. Unless the instructor announces otherwise, if a scheduled exam is canceled by snow or for any other reason, the exam will be given during the next scheduled class period. For the final 25% of the grade, students will each present a chapter from Trevathan, et al. (2008) as approved by the instructor. Guidelines for presentations will be distributed in class.

Course schedule
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings:</th>
<th>Presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 20</td>
<td>1-Introduction</td>
<td>G ch 1, P ch 1 &amp; 2</td>
<td></td>
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<tr>
<td>Jan 27</td>
<td>2-Evolutionary Theory</td>
<td>G ch 2, P ch 1 &amp; 2</td>
<td></td>
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<tr>
<td>Feb 3</td>
<td>3-Molecular Basis of Variation</td>
<td>G ch 3, P ch 3</td>
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<tr>
<td>Feb 17</td>
<td>4-Evolution and Development</td>
<td>G ch 4</td>
<td>3</td>
</tr>
<tr>
<td>Feb 19</td>
<td>5-Evolution of Life Histories</td>
<td>G ch 5, P ch 5</td>
<td>3</td>
</tr>
<tr>
<td>Feb 24</td>
<td>6-Origins of Human Diversity</td>
<td>G ch 6, P ch 2</td>
<td>1 + review</td>
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<tr>
<td>Mar 3</td>
<td>Class cancelled</td>
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<td></td>
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<tr>
<td>Mar 10</td>
<td>SPRING BREAK</td>
<td></td>
<td></td>
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<tr>
<td>Mar 17</td>
<td>Exam 1</td>
<td></td>
<td></td>
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<tr>
<td>Mar 24</td>
<td>7-Reproduction</td>
<td>G ch 7, P ch 6, 7, 8, 9</td>
<td>2</td>
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<tr>
<td>Mar 26</td>
<td>8-Nutrition and Metabolic Adaptation</td>
<td>G ch 8</td>
<td>2</td>
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<tr>
<td>Mar 31</td>
<td>9-Defense</td>
<td>G ch 9, P ch 6, 7, 8, 9</td>
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<tr>
<td>Apr 2</td>
<td>10-Social Organization and Behavior</td>
<td>G ch 10, P ch 10, 11</td>
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<tr>
<td>April 7</td>
<td>Exam review</td>
<td></td>
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<tr>
<td>April 14</td>
<td>Exam 2</td>
<td></td>
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<tr>
<td>April 21</td>
<td>TBD</td>
<td></td>
<td></td>
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<tr>
<td>April 28</td>
<td>11-Evolutionary Principles and</td>
<td>G ch 11</td>
<td>3</td>
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<tr>
<td>April 30</td>
<td>Medical Practice</td>
<td></td>
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<tr>
<td>May 5</td>
<td>Final Exam Review</td>
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<td></td>
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<tr>
<td>May 7</td>
<td>Final Exam</td>
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<td></td>
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</tbody>
</table>

Presentation files and other material will be available on Blackboard.

Last Day to Add: January 27, 2015; Last Day to Drop: February 20, 2015

Students in need of academic accommodations should contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

**Academic Integrity**

GMU is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit to those people in the proper, accepted form. When doing homework, the work must be yours. It is totally unacceptable to copy the work of another student in this course in any form.

**GMU Email Accounts**

Students must use their Mason email account to receive important University information, including messages related to this class. See http://masonlive.gmu.edu for more information.
Useful Campus Resources:

Writing Center: A114 Robinson Hall; (703) 993-1200; http://writingcenter.gmu.edu

UNIVERSITY LIBRARIES “Ask a Librarian” http://library.gmu.edu/mudge/IM/IMRef.html

Counseling and Psychological Services (CAPS): (703) 993-2380; http://caps.gmu.edu

University Policies

The University Catalog, http://catalog.gmu.edu, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at http://universitypolicy.gmu.edu/. All members of the university community are responsible for knowing and following established policies.