

# MASTER OF SCIENCE IN BASIC MEDICAL SCIENCE

# **BMS ACADEMIC GUIDE**

This guide is compiled to present information relevant for matriculation into the Master of Science in Basic Medical Sciences Program at WSU School of Medicine (SoM), under authority granted by the Office of Biomedical Graduate Programs, Graduate School, and Wayne State University (WSU). WSU Graduate School information and requirements are detailed in the Graduate Bulletin, <a href="https://bulletins.wayne.edu/graduate/school-medicine/programs/basic-medical-sciences-ms/">https://bulletins.wayne.edu/graduate/school-medicine/programs/basic-medical-sciences-ms/</a>. The Office of Biomedical Graduate Programs and the BMS Program impose, in some cases, additional and superseding requirements to those of the Graduate School in regards to admission, matriculation, status/progress, and degree. Both this MS in BMS Academic Guide and the WSU Graduate Bulletin should be routinely consulted. This Academic Guide serves as a reference source to guide you through the various processes and requirements needed as you progress towards your MS in BMS degree.

### OFFICE OF BIOMEDICAL GRADUATE PROGRAMS 1128 Scott Hall (313) 577-1455

Vice Dean of Research and Graduate Programs: TBA

Associate Dean of Research and Graduate Programs: Dr. Ryan Thummel Interdisciplinary Biomedical Sciences Curriculum Director: Dr. Ryan Thummel MD/PhD Program Director: Dr. Ryan Thummel Graduate Programs Associate Director & MD/PhD Coordinator: Deanna Dona Basic Medical Sciences Master's Program Director: Dr. George Brush Basic Medical Sciences Master's Program Management Specialist Ms. Julianna Barjaoui

#### GRADUATE SCHOOL REFERENCES & CONTACTS

#### **Graduate Student Services**

5057 Woodward, 6th floor Detroit, MI 48202 Phone: 313-577-2170 Fax: 313-625-6053

Office hours: 8:30 a.m. to 5 p.m. General questions: gradschool@wayne.edu

Scholarship questions: gradscholarships@wayne.edu

#### ADDITIONAL REFERENCES & CONTACTS

#### Office of the Registrar **Student Services Center Housing & Residential Life** Records/ Registration

The Welcome Center Welcome Center Student Center Building 5221 Gullen Mall, Rm. 582 42 W. Warren Ave. 42 W. Warren Ave. Detroit, MI 48202 Detroit, MI 48202 Detroit, MI 48202 313-577-3541 313-577-2116 313-577-2100 studentservice@wayne.edu housing@wayne.edu wayne.edu/registrar

> wayne.edu/studentservice housing.wayne.edu/live/halls-apartments

#### **One Card/Parking Services** Office of International Students and Scholars

Welcome Center Welcome Center 42 W. Warren Ave., Rm. 257 42 W. Warren Ave., Rm. 416 Detroit, MI 48202 Detroit, MI 48202 313-577-CARD (2273) 313-577-3422 parking.wayne.edu/faculty/onecard

oissmail@wayne.edu (General Questions) oissscholars@wayne.edu (Scholar Related)

oiss.wayne.edu

<u>Wavne State University Public Safety</u> Chief Anthony D. Holt, Associate Vice President 6050 Cass Avenue 313-577-2222 (24 hrs. /day) Emergency Phones @Blue Light Kiosks on Campus

#### GENERAL INFORMATION

**Security & Photo I.D. Badges**: The Medical School issues each student and employee picture identification cards (**OneCard**), which must be displayed when entering campus buildings. Security guards are posted at the front door of Scott Hall to check I.D.s 24 hours a day. One Card/Parking Service Center is located at 42 W. Warren. A representative can be reached at 577-CARD (2273) or by email at <a href="mailto:onecard@wayne.edu">onecard@wayne.edu</a>.

**Parking**: If you have a car, you can park on any of the streets adjacent to the SOM free of charge. Be certain to observe the posted parking restrictions to avoid towing and parking fines, which can be more than \$50.00. You may also park in the surface lot on the north side of Canfield Ave, opposite Scott Hall. The fee is \$8.50, per entry, for students or guests using cash/credit card to enter the lot. You may also purchase a debit card from dispensers in parking structures on the main campus or at the Parking Office to exit the lot. Funds may also be deposited into a personal prepaid service account using one of the CSVT (Cash System Value Terminal) on campus. The WSU OneCard is then used at the entrance gate where the parking fee (\$4.00) is debited from the personal account. Alternatively, you may obtain a yearly parking card by paying cash or arrange for a biweekly payroll deduction. Contact Parking Services at <a href="mailto:parking@wayne.edu">parking@wayne.edu</a>, for additional information.

Bulletin Boards: There are numerous bulletin boards around the school. There is a board outside the Graduate Programs Office, 1128 Scott Hall, which is maintained by Associate Dean and dedicated to the Interdisciplinary Biomedical Sciences (IBS) program and related graduate student information. In addition, there are bulletin boards near the elevators for posting flyers (e.g. meeting announcements, fellowship announcements, etc.) relevant to graduate students. You should take the time to note the location of these bulletin boards and check them regularly.

<u>Program Announcements</u>: These announcements are made and distributed in various ways depending on the importance and degree of circulation required. All students will be expected to activate and use their WSU issued e-mail access. Much of the general communications to students will take place through the BMS ListServ. Details regarding access and use will be provided separately. In addition, some announcements will be posted on the Graduate Programs Office board, outside of room 1128.

Computer Facilities & Services: The Graduate Programs Computer Room (2276 Scott Hall) is fully equipped with computer resources available for students. The Graduate Programs office is open from 8:30 am - 5:00 pm. We will try to fill the paper trays in the morning and afternoon so that you will have paper available after business hours. You are allotted 1200 pages for each academic year (from September - September). When you have depleted your allotted pages, you can purchase more pages at the Learning Spaces and Support Office (2314 or 2361 Scott Hall). The Learning Spaces and Support Office takes checks only; no cash is accepted. If you need paper, toner, if there is a paper jam, or you encounter computer or printer technical problems you must contact the Graduate Programs office at 577-1455 or visit our office at 1128 Scott Hall. For login issues, contact the MSIS helpdesk at 577-1527. MSIS is not responsible for paper, paper jams or toner issues.

In addition to the Graduate Programs Computer Room (2276 Scott Hall), the Medical School computer lab (325 MEC) and the Shiffman Library are available for your use. The Medical School computer lab (325 MEC) is not available during times when MD exams are being administered. The Shiffman Library has public use computers; however, printing is not available. To gain access you will have to get your OneCard coded by filling out a Card Key I.D. Badge/Access Card Authorization Form.

<u>Bookstores</u>: The Barnes & Noble Bookstore, located at 82 W. Warren, carries virtually all the textbooks and supplies needed for the various courses offered.

<u>Libraries & Library Services</u>: Numerous library facilities are available to WSU students including the Shiffman Medical Library next to Scott Hall, which is a major medical information resource center in Detroit. The Purdy and Kresge libraries are located on main campus. The Medical Library offers MEDLINE, PubMed, and other computer-based literature searches. Abstract and photocopying services are available on a fee-for-service basis. Debit type electronic photocopy cards are also available for purchase. Various departmental libraries in Scott Hall have reference materials available for onsite use only. Books and periodicals CANNOT be checked out from these libraries.

<u>Lost & Found Services</u>: The SoM maintains a lost and found office on the first floor of Scott Hall (1102) in the Information Office. If you have lost, misplaced or found a personal item (phones, bags, books, notes, clothing, etc.) you should visit the Lost & Found.

<u>Meals</u>: Meals are served at Delite Express in the Scott Hall cafeteria from approximately 9 am to 4 pm Monday-Thursday and 9 am to 2 pm Fridays. There are vending machines and microwave ovens in the dining room for use at other times. You may also eat in the dining rooms of the various WSU Medical Center hospitals. You must wear your ID card.

**Lecture Halls & Conference Rooms**: Scott Hall has two types of lecture halls. (1) Medical student lecture halls, which are Jaffar - Freshman; Green & Blue - Sophomore. Medical Student lecture halls are located on the west end of Scott Hall on the 2nd & 3rd floors. (2) The Graduate Student lecture halls are rooms 2268 and 3125. There are also several smaller (10-30 person) conference rooms located on the first floor of Scott Hall, which are available on a schedule-for-use basis. For room reservations, you can visit the Facilities and Support Services office in room 1102 Scott Hall or by phone at 577-1460. In addition, each Department has a seminar/library room (numbered x364) on floors 4 through 9 of the building.

Get Connected: Admitted students are provided with a WSU access ID (format is XX####) and password; students can modify the assigned password. The WSU access ID is each student's official WSU e-mail address (XX####@wayne.edu). As soon as possible students should go the WSU website (www.wayne.edu) and access Academica. Students have access through Academica to the schedule of classes, registration, general academic information, and Canvas (which some courses use to post course information and grades). NOTE: faculty and students in courses can use a course's Canvas site for e-mail communication that is limited to the XX####.wayne.edu e-mail address.

\*All BMS forms and guides are on our website: www.gradprogs.wayne.edu/formsandguides

#### **Calendar of Events**:

https://events.wayne.edu/

#### **The SOUTH END:**

https://www.thesouthend.wayne.edu/

This newsletter lists events during the coming week; distribution includes Scott Hall.

# Master of Science in Basic Medical Science Program

#### **PURPOSE:**

The purpose of the Basic Medical Sciences Program is to provide a broadly based <u>interdisciplinary</u> and <u>didactic Master's level education in the sciences basic to current biomedical education for individuals who have earned a bachelor's or higher-level degree. The MS in BMS Program is a Plan B Master's degree awarding program, that requires an Essay for the degree; this is neither a Plan A (original experimental research-based Thesis) nor a Plan C (course work only) Master's degree.</u>

The goals of the MS in BMS Program are to enable students to present to professional schools an academic record that provides evidence of sufficient academic aptitude to gain admission to the professional school, and [2] to enhance accomplishment of career objectives.

#### **SCOPE & SCHOLARSHIP:**

The MS in BMS Program requires a minimum of 34 earned cumulative credits, with a minimum earned cumulative GPA of 3.0, in selected graduate (neither undergraduate nor post-baccalaureate) level courses.

- **BMS CORE courses:** Within <u>selected</u> BMS CORE courses that are identified by the MS in BMS Program, a minimum of one (1) BMS CORE course is required in at least four (4) basic medical science disciplines (Biochemistry, Cancer Biology, Immunology & Microbiology, Molecular Genetics & Genomics, Pharmacology, Physiology, and Psychiatry). In addition, an earned grade of at least 'B' is required for a CORE course to qualify to fulfill this requirement.
- **BMS** Elective courses: <u>Selected</u> advanced basic science courses that are identified by the MS in BMS Program and offered by the departments and programs in the School of Medicine (ANA, BMS, BMB, CB, CM, IM, MGG, ROC, PHC, PSL, and PYC) may be taken.
  - O All course work must be completed in accordance with the WSU Graduate School, Office of Biomedical Graduate Programs, and MS in BMS Program regulations governing academic scholarship; an earned cumulative GPA of at least 3.0 is required for continued 'regular' enrollment. Should the earned cumulative GPA be <3.00, students are placed on Academic Probation by the Registrar. Academic Probation has the risk of causing termination; students placed on academic probation by the Registrar are required to consult the MS in BMS Graduate Officer immediately.
- BMS Plan of Work: During the second term of full-time matriculation each student should (mostly for your own good) complete a Plan of Work and have it approved by the Graduate Officer and Graduate Programs administration. The purpose of the Plan of Work is to permit advancement to Master's degree candidacy and to be assured all MS in BMS degree requirements are identified and plan to be fulfilled.
- **BMS Essay:** The MS in BMS degree requires BMS7999-Essay (3 cr.) with a passing grade. The BMS Essay requires: (A) Identifying Essay Committee, (B) Completing Essay Outline, (C) Final Essay and Final Report Form with an approved grade.

# General Academic Policies & Requirements

#### ACCEPTANCE BY MS IN BMS PROGRAM & ADMISSION BY WSU GRADUATE SCHOOL

Students are advised that, as specified in the WSU "Student Due Process Policy", prohibited conduct includes knowingly furnishing false information (both academic and non-academic) to the University. Applicants who knowingly furnish false application information and gain admission may be processed for disciplinary action under this policy.

- ACCEPTANCE into the MS in BMS Program has requirements that supersede the Graduate School's, including (A) an earned cumulative GPA of at least 3.0 (for Regular Admission), (B) acceptable results on a standardized examination that specifically evaluates proficiency at the undergraduate level and academic aptitude for graduate education (e.g. MCAT, GRE, DAT, PCAT or equivalent), (C) Statement of Purpose, and (D) Letters of Recommendation.
- **ADMISSION** by the WSU Graduate School is mandatory for matriculation into the MS in BMS curriculum. WSU Graduate School admission requires original and official (issued by and directly from the Registrar) degree posted transcripts, fulfillment of the English Proficiency requirement, and a recommendation for admission by the MS in BMS Program. The following admissions classifications are explained because some add specific academic regulations.
- **REGULAR ADMISSION:** Permits full-time graduate level enrollment.
- **QUALIFIED ADMISSION:** Permits full-time graduate level enrollment for applicants who have an earned cumulative undergraduate GPA that is less than 3.00, but at least 2.65. This would also pertain to applicants who graduated from an institution that is not accredited. Admission under this status is probationary, meaning you must maintain a 3.0 GPA in your first term to continue enrollment in the program.
- NON-DEGREE ADMISSION: This classification is not admitted into the MS in BMS Program, admission is by SoM Graduate Programs. The MS in BMS Program limits its recommendation for non-degree acceptance to applicants who fall below the admissions standards of the BMS program. For those admitted in this classification "only one semester of full-time graduate study, or part-time registrations not to exceed nine credits, is normally permitted" (WSU Graduate Bulletin). Further, "not more than nine credits, subject to the approval of the Graduate Officer, may be applied at a later date toward the resident and credit requirements for the master's degree" (WSU Graduate Bulletin).
- **POST-BACHELOR Admission:** Acceptance into the MS in BMS Program is absolutely prohibited in this classification because the MS in BMS Program is a graduate, not an undergraduate, curriculum. At WSU, post-bachelor level courses are 5000-6000 level.

#### DEGREE REQUIREMENTS for the MS in BMS Degree

The minimum Graduate School and MS in BMS Program requirement for the master's degree is thirty-four (34) earned cumulative qualifying credits, at least twenty-four (24) of these credits must be taken in the MS in BMS curriculum at WSU-SOM. The Master of Science in BMS degree plan is restricted to a Plan B degree that requires a total of thirty-four (34) credits, including three (3) credits for an essay that requires enrollment in BMS7999-Essay in Basic Medical Science.

- PLAN of WORK & CANDIDACY: Candidacy is a necessary, but not sufficient, requirement for graduation. The student, in conjunction with the Program Coordinator or the BMS Program Director completes the Plan of Work (PoW) via DegreeWorks (https://degreeworks.wayne.edu/). The purpose of the PoW is to identify courses in the BMS curriculum that will permit the student to fulfill the BMS Program & WSU Graduate School Master's degree requirements. The PoW, if necessary, can be subsequently modified via a Change in PoW. Courses on the PoW should, to the extent possible, also fulfill each student's professional objectives. Students in the MS in BMS Program are expected to file a Plan of Work upon earning 8-12 graduate credits, but no later than the end of the second term of full- time enrollment. Students whose PoW has been approved, and who have been nominated for candidacy will be advanced to the rank of "Master's Candidate". Failure to complete a PoW prior to the end of the 2<sup>nd</sup> Term will result in a Candidacy Hold that will prevent registration.
- **ESSAY:** Under Plan B, students are required to complete an essay prior to the granting of a master's degree. The essay must show evidence of scholarly study and writing and be related to the student's major in Basic Medical Sciences. The Office of Biomedical Graduate Programs is responsible for running a plagiarism check through Unicheck.
- TIME LIMITATION: Candidates in the MS in BMS Program have a six-year (6 year) time limit to complete all requirements for the M.S. degree. The six-year period begins with the end of the semester during which the student matriculated into the MS in BMS program. A candidate may request a time extension from the BMS Program Director. The request must include a description of the students' progress toward completion of the degree, a timeline for completing the degree including a revised Plan of Work, and evidence of currency in the Basic Medical Sciences field. Official final approval is contingent upon approval by the BMS Program Director, by the Office of Biomedical Graduate Programs administration, and by the Graduate School. Extensions are limited to twelve (12) years within admission and matriculation.
- **PROGRAM WITHDRAWAL:** Students who choose to withdraw from the Program for academic or other reasons should communicate to the Program Coordinator in writing the reason(s) for withdrawal and specify their future professional intent (for example, acceptance and matriculation into medical school). The MS in BMS Program policy is that, should a MS in BMS student/candidate be admitted to a professional program (e.g. medical, dental, pharmacy school, etc.) <u>before</u> completion of the BMS degree, then that student is unconditionally released from all obligations to the BMS Program. The BMS Program is willing to communicate this policy to a professional school at the students' request and provision of direct mailing information. The MS in BMS Program recommends, but does not require, that a student within 3 to 6 credits of completion of the degree should make every effort to complete the degree before, during, or after matriculation in their professional program and have 6 years from matriculation date of the BMS Program to do so.

• **GRADUATION:** Degree candidates must file a *Graduate Application for Degree* through **Academica** in the term they are expected to complete program requirements. Those expecting to graduate in the next term should consult the WSU Graduate School web site for the most current deadlines, requirements and forms. A new application is mandatory if a student filed but did not graduate in the term of their original application. That is, a student cannot graduate in any term unless a degree application has been filed and approved for the specific term in which the student will complete all graduation requirements. If the deadline has passed, the student can contact the Office of Biomedical Graduate Programs staff to determine if they can still apply to graduate.

#### **ACADEMIC REGULATIONS**

From the WSU Graduate Bulletin: "Continuance in graduate status is contingent upon the student keeping informed of all rules, regulations and requirements and complying with all official procedures of the Graduate School, the individual college or school, and the MS in BMS Program. The student is responsible for fulfilling all course and degree requirements in proper sequence with satisfactory scholarship. In case of doubt regarding any matter affecting his/her standing as a graduate student, the student should consult with the BMS Graduate Officer. The primary responsibility of keeping informed of policy and procedures rests with the student. Regulations in the WSU Graduate Bulletin and herein should not be construed as exhaustive."

- **CREDITS:** A credit (credit hour) is defined as one class hour per week or its approved equivalent. In graduate level courses, the preparation and study time per credit significantly exceeds (two-to four-fold greater or more) than experienced at the undergraduate level. Further other modes of instruction (for example, BMS7880-Special Topics/Projects, XXX7996-Research, BMS7999-Essay in Basic Medical Science) typically require an extended time commitment on a credit hour basis
- TRANSFER of CREDIT: Courses, from outside or within WSU, accepted for transfer of credit towards the MS in BMS degree cannot have provided credit toward a prior degree. In work toward the MS in BMS degree, credits beyond the twenty-four credits that must be earned during BMS program enrollment (that is, no more than ten (10) credits may be transferred from accredited graduate schools). The transferable credits must be graded at "B" or better, must be certified as graduate-level credit on an official transcript, and must be equivalent to WSU 6000 level or higher graduate level didactic (not laboratory or research) courses. A Graduate Transfer of Credit form must accompany a written request for transfer of credit. The BMS Program Director may require descriptions of the course including a syllabus and has the authority to evaluate each course for relevance to the BMS curriculum. All credit transfers require the approval of the MS in BMS Program's Program Director and the SoM Associate Dean of Biomedical Graduate Programs.
- NORMAL & MAXMIMUM PROGRAM LOAD: For the MS in BMS Program, a full-time graduate student is one who is enrolled for six (6) or more credits each WSU Fall and Winter term. For other reasons, there may be a higher enrollment (credit) requirement; for example, WSU Graduate School official policy requires at least eight (8) credits for full-time status and financial aid may have other full-time enrollment requirements. Students with a strong academic record who are devoting full-time to graduate study are permitted by the WSU Graduate School to register for a maximum of sixteen (16) credits per semester; the BMS Program advises no more than fourteen (14).

#### UNIVERSITY GRADING SYSTEM- GRADUATE

• **GRADES:** The graduate grading system is intended to reflect higher standards of critical and creative scholarship than those applied at the undergraduate level. Final grades in graduate courses are recorded under the following system. For the MS in BMS Program grades below 'B' are regarded as below graduatestandards:

A A- B+	Excellent	4.00 grade points per credit hour 3.67 grade points per credit hour 3.33 grade points per credit hour
B B- C+	Good	3.00 grade points per credit hour 2.67 grade points per credit hour 2.33 grade points per credit hour
C		2.00 grade points per credit hour
$\mathbf{F}$		0.0 grade points per credit hour.

- MARKS: Marks in graduate courses are recorded under the following system:
  - 'I' Incomplete: Assigned when a student has not completed all the course work as planned for the course and when there is, in the judgment of the instructor, a reasonable probability that the student can complete the course successfully without attending regular class sessions. The responsibility for completing all course work rests entirely with the student. A final grade is recorded when the student completes appropriate course work as arranged with the instructor. The student must complete the course work within one calendar year. In the event of extenuating circumstances, the instructor may agree to extend the completion period allowed for incomplete courses beyond one year. If regular attendance is necessary to complete course work, the mark of 'X' (see below) should be assigned, and the student must register for the class for the semester in which attendance is planned. Any unchanged mark of 'I' will, within one calendar year from the time it was received, be changed to a grade of 'F' or failure. There are no extensions permitted under this policy, and the grade shall not be changed once the "F" is posted.
  - o 'W' Official Withdrawal: Assigned when a student drops the course in accordance with university policy- WF (withdrawal failing); WP (withdrawal passing); WN (withdrawal nonattendance).
  - o 'X' No Grade Awarded: Assigned when there has been insufficient work submitted and there is no basis to assign a grade; this is a non-punitive mark. An 'X' mark cannot be changed.
  - o 'Y' Deferred: Assigned when the student is up to date in the course work, in a course planned to continue beyond the semester (for example, BMS7999-Essay in Basic Medical Science).
- CHANGES of a GRADE or MARK: Once the Registrar has recorded grade/mark, it can only be changed if an official Change of Grade form is approved. The Change of Grade form must be completed and signed by the instructor, submitted directly by the instructor to the SoM Graduate Programs Coordinator, and received by Student Records within three semesters (one calendar year) after the end of the term for which the course was originally graded/marked.

#### GRADE POINT AVERAGE REQUIREMENTS & RETAKING COURSE:

- **GPA Requirements:** MS in BMS students are required to earn and maintain an earned cumulative "B" (3.00) grade point average (GPA) in the BMS curriculum to attain and to maintain Regular graduate status. In addition, to be awarded the MS in BMS degree, a student must have achieved at least a 'B' (3.0) earned cumulative grade point average in the BMS curriculum.
  - o "Grades of 'B-minus' and below are unsatisfactory for graduate level work and constitute valid cause for dropping a student from a graduate program" (WSU Graduate Bulletin). A limited number of grades of 'B-', 'C+' or 'C', though unsatisfactory, may be applied toward a graduate degree provided enough higher grades to maintain an earned cumulative grade point average of at least 3.00 in the BMS curriculum offsets them.
  - Students whose earned cumulative GPA is below 3.00 automatically are placed by the Registrar on "Academic Probation". These students are required to consult the BMS Program Director or Program Coordinator to develop a plan to achieve the 3.00 earned cumulative GPA requirement and will not be permitted to register without the Program Coordinator's consultation.
- Retaking Courses: The WSU Graduate School permits specific limitations on the number of grades below 'B' that may count toward a graduate degree and on the number of grades below 'B' in specific courses. The BMS Program requires grades of 'B' or better in BMS CORE courses that count towards the BMS CORE course requirement. The BMS Program permits up to two (2) BMS CORE courses to be repeated that had earned a grade less than 'B'. WSU Graduate School and Registrar's policy on retaking courses is that the original grade for the course will remain on the student's transcript but only the grade received in retaking the course will be used in computation of the student's grade point average for the BMS Program.

#### **ACADEMIC APPEALS & DUE PROCESS**

• Academic Appeals: Grade appeals must be filed within thirty (30) days of the time the student has or should have received his/her final grade. In the case of grade appeals, petition for waiver of a requirement or grievance for academic reasons, the individual student should make an appeal for clarification or correction in the following order. Time is of the essence; the following order should be completed within 30 days of the appeal or receipt of final grade. The first priority is immediate contact with both the Instructor and the MS in BMS Program Director.

The following specifies the official SoM Grade Appeal policy.

"SoM Grade Appeal Policy - The student who wishes to appeal a grade must first attempt to resolve the matter directly with the instructor. If a resolution does not occur at this level, the student must appeal in writing to the Department Chair. The next stage of appeal is to School of Medicine's Deans designee-the Associate Dean of Graduate Programs.

It is the instructor's prerogative to evaluate student work and assign grades in accordance with his/her academic and professional judgment. Grounds to appeal a final grade are:

- I. Application of non-academic criteria in the grading process.
- 2. Sexual harassment; or
- 3. Evaluation of student work by criteria is not directly reflective of performance relative to course requirements. In those instances where a student disputes the final grade awarded, the following steps should be taken to appeal the grade inquestion.

**Informal Review** - The student should discuss the disputed grade with the instructor of the course. If the dispute is not resolved informally, the student may initiate a formal appeal.

#### Formal Appeal Process

- 1. Within 30 calendar days following official notification of grades for the semester in which the disputed grade was awarded, and when the informal review fails to resolve the dispute, the student should initiate a written appeal directed to the instructor. If the dispute remains unresolved, subsequent appeals shall be directed to the Department Chair and to the Dean School of Medicine, if necessary.
- 2. The student shall submit a written statement detailing his/her objection(s) along with supporting documentation to the Department Chair.
- 3. The Department Chair shall review the complaint. He/she will discuss the objections of the student with the instructor of the course and try to resolve the grade dispute.

In those rare cases, when the grade dispute is not resolved at the departmental level, the student may appeal to the Associate Dean for Graduate Programs who is the designee of the School of Medicine's Dean. Where appropriate the Dean's designee and/or Dean may discuss the issue with various parties involved in the grade dispute. The Dean's designee and/or Dean's decision is final at the School level. Any meetings held in relation to the appeal shall afford the parties the opportunity to present additional information orally or in writing. Students shall be notified in writing of the Department or School's decision regarding the appeal within 60 calendar days of lodging the formal appeal.

Students may contact the University Ombudsperson, 790 Student Center (SCB), 313-577-3487, at any time for assistance with any problem associated with a grade decision or grade appeal."

Students are advised to consult the Graduate Bulletin for additional details and requirements for University review of the School of Medicine's final grade decision. In the situation where the School of Medicine's final decision is based upon evaluation of a student's academic performance, and when review procedures available to the student within the School of Medicine have been exhausted, the student may request the University Provost to review the decision record. A written request for a Provost Review must be made by the student themselves, with a copy to the School of Medicine's Associate Dean for Graduate Programs, postmarked within thirty calendar days of the postmark of the School of Medicine's final decision, which is to be sent to the address provided by the student in the School of Medicine review procedures. The Provost's review of the School of Medicine's decision will proceed as soon as practicable after notification by the student of their wish to seek review. The student may also file with the Provost a Request for a Postponement of the effect of the School of Medicine's final decision.

**Due Process**: Students are advised to consult the "Student Due Process Policy". The policy (1) establishes the expectations that students are accountable for their behavior; (2) describes acceptable student conduct, both academic and non-academic; (3) describes disciplinary policies and procedures; (4) specifies the rights of the student and other parties; (5) specifies prohibited conduct and sanctions to be imposed if such conduct occurs. Examples of prohibited conduct subject to the Student Due Process Policy include, but are not limited to, knowingly furnishing false information (both academic and non-academic) to the University, academic dishonesty, disorderly behavior, theft, damage of property, illegal drugs, weapons on campus, false report of emergency, unauthorized entry, violation of criminal law, etc.

#### REGISTRATION & ENROLLMENT

Admitted students receive a WSU access ID (XX####) to access Academica at <a href="www.academica.wayne.edu">www.academica.wayne.edu</a>
to access academic information and register. ALL registrations are accomplished by using the Academica web registration system (<a href="https://registration.wayne.edu/StudentRegistrationSsb/ssb/registration">https://registration.wayne.edu/StudentRegistrationSsb/ssb/registration</a>). For instructions on how to register, visit <a href="https://wayne.edu/registar/registration/how-to.">https://wayne.edu/registar/registration/how-to.</a> Students are advised to identify prerequisites and co-requisites for a particular course; enrollment without the completed prerequisites or co-requisites, in the judgment of the instructor, increases the risk for a less than satisfactory grade.

Holds prohibit a student from registration, transcript acquisition, graduation, etc. Failure to provide an official transcript-proving award of prior degree will cause a hold from registration. Financial holds are the responsibility of the individual student to resolve. Academic holds should be addressed to the MS in BMS Program Coordinator to identify how the academic hold can be resolved as soon as possible. The MS in BMS Program Coordinator can have an academic hold released on a semester-by-semester basis, but students should consult the limitations to release under *Academic Regulations*.

- **REGISTRATION DEADLINES:** Consult the Academic Calendar for specific dates that vary by academic term and calendar year. <u>Priority Registration</u> begins approximately two months before the beginning of the term. <u>Open Registration</u> begins approximately one month before the beginning of the term. <u>Late Registration</u>, which carries an additional fee, ends approximately two weeks after the official beginning of classes.
- SCHEDULE of CLASSES: Students should consult the listing of courses that qualify for the BMS curriculum from the Graduate Bulletin, the MS in BMS student guide, and/or communicate directly from the MS in BMS Program Coordinator. Students can then identify the courses available for a particular term at <a href="registration.wayne.edu">registration.wayne.edu</a>. Course reference numbers; class session days, times and locations; faculty instructors and additional information are provided. Also specified are the days, times and locations for registration, and the registration procedures.
- **REGISTRATION OVERRIDES:** Certain courses require approval PRIOR to registration, which the individual student choosing to register has the responsibility to secure before registration in the course by contacting the instructor directly. These include but are not limited to the following:
  - O Courses requiring the MS in BMS Program Director's prior approval include BMS7880-Special Topics/Projects, XXX7996-Research, and BMS7999-Essay in Basic Medical Science. For Laboratory and Research courses, e.g. BMS7880, XXX7996, and similar courses, the student must file a "PETITION & AUTHORIZATION for RESEARCH STUDIES in BMS" form, specifying the student's name and ID number. The course number, credits and term, as well as instructor's name and signature are mandatory. A brief description is required of the Project, the significance of project to your training, and how will project be evaluated.
  - Courses requiring the course instructor's approval are specified in the course description, which the individual student choosing to register must secure before registration in the course.
  - o If you are having difficulty registering for a course, it may be necessary to obtain a registration override from the Office of Biomedical Graduate Program. Reasons you may need to obtain a registration override:
    - Major/Class restrictions
    - Instructor and/or Department approval required
    - Time conflicts and enrolling in a closed section
    - Late Add after the registration deadline, see Drop/Add

**ADD/LATE ADD COURSE**: if you wish to ADD a course during the semester, you can do so before the appropriate deadline by using the web registration system at:

https://registration.wayne.edu/StudentRegistrationSsb/ssb/registration. If it is after the appropriate deadline, you must obtain a LATE/ADD form from the Graduate Programs Office (1128 Scott Hall) and acquire the instructor's signature and/or the Program Director's signature. Return the form to the Graduate Programs Office for a LATE override. Registration will then add the class from their office manually for you.

<u>DROP/WITHDRAW COURSE</u>: To drop a class, you will need to log in to the Registration Portal (registration.wayne.edu) and log in to "Register for Classes". Additional information to drop a course can be found at <a href="https://wayne.edu/registrar/dropping-a-class/">https://wayne.edu/registrar/dropping-a-class/</a>. You are permitted to drop from a course anytime through the end of the second week of classes. Beginning the third week of class you are no longer allowed to drop a class, you must withdraw. Information and instructions on how to withdraw from a course can be found at <a href="https://wayne.edu/registrar/withdrawing-from-a-course/">https://wayne.edu/registrar/withdrawing-from-a-course/</a>. Withdrawing from a course **does not** cancel tuition or fees. **You are still charged for courses from which you withdraw**. All withdrawals will appear on your transcript.

PRIOR to the published official DROP/ADD deadline for each term: Students can add/drop course(s) by using the web registration systems.

FOLLOWING the published official DROP deadline for each term: Student must get instructor approval for withdrawal. A SMART CHECK through Academica will have to be completed. More information on SMART CHECK can be retrieved from the Office of the Registrar.

#### TUITION, FEES & FINANCIAL AID

Students are advised to consult <a href="https://wayne.edu/registrar/tuition/">https://wayne.edu/registrar/tuition/</a> for current schedules of Tuition and Fees, because tuition and fees are subject to change without notice by action of the WSU Board of Governors. Financial holds that prohibit registration by a student due to outstanding balances are the sole responsibility of the student to relieve to permit registration.

- **TUITION:** Tuition is based on the graduate tuition rate and residency; that is, there are differential tuition rates for Michigan residents and those who are not Michigan residents. Decisions regarding residency are the sole purview of Wayne State University; current residency criteria and review procedures can be found at <a href="https://wayne.edu/registrar/tuition/">https://wayne.edu/registrar/tuition/</a>. Tuition cancellation rates, policies and procedures are the purview of the Registrar; consult <a href="https://wayne.edu/registrar/tuition/fee-charts/">https://wayne.edu/registrar/tuition/fee-charts/</a> for current rates, policies and procedures see the tuition calculator at <a href="http://apps.reg.wayne.edu/tuition">http://apps.reg.wayne.edu/tuition</a>.
- **FEES**: Fees include, but are not limited to, Application Fee, Student Exchange & Visitors Information Service (SEVIS) Fee, Registration Fee, Late Registration Fee, Fitness Center Fee, Graduation Fee, and Transcript Fee.
- **FINANCIAL AID:** The Graduate School Financial Aid Office at 42 West Warren in the Welcome Center has specific information on the scholarships, fellowships and other types of support available to the students.
  - o Many students who are accepted into SoM Graduate Programs are eligible for some type of financial support. Receipt of an award depends upon the students' overall academic record and the availability of funds.

- o **Graduate Professional Scholarships (GPS):** These University funded tuition Scholarships are open to pre- doctoral and master's students and awarded annually on a competitive basis. Applications are due each February with awards announced in April with activation dates in September. The awards are for tuition only at the Michigan residency rate regardless of the entering residency status of the recipient student.
- Travel Awards There are no travel award scholarships available for BMS students.

#### MS in BMS Curriculum

The Basic Medical Sciences curriculum is a **broadly based** (interdisciplinary) and didactic Master's level curriculum in human biology. The MS in BMS degree requires a minimum of 34 earned cumulative credits, with a minimum earned cumulative GPA of 3.0, in selected graduate (neither undergraduate nor post- baccalaureate) level courses.

Courses in the BMS curriculum are selected and specifically identified as BMS CORE courses, BMS Elective courses and the BMS7999-Essay in Basic Medical Science. Courses outside those listed only will be applied toward the degree requirements with, prior to enrollment, the written authorization of the BMS Graduate Officer. A successful outcome in the BMS curriculum can enable students to present to professional schools an academic record that provides evidence of sufficient academic aptitude to gain admission to the professional school. The MS in BMS Program is a **Plan B Master's degree awarding program that requires an Essay for the degree (BMS7999-Essay in Basic Medical Science.** It is neither a Plan A (original experimental research-based Thesis) nor a Plan C (course work only) Master's degree.

All course work must be completed in accordance with the WSU Graduate School, SoM Graduate Programs, and MS in BMS Program regulations governing academic scholarship; an earned cumulative GPA of at least 3.0 is required for continued 'regular' enrollment. Should the cumulative GPA be <3.00, students are placed on Academic Probation by the Registrar. Academic Probation has the risk of causing termination; students placed on Academic Probation by the Registrar are required to consult with the MS in BMS Graduate Officer or Program Coordinator immediately.

#### SEQUENCE of BMS PROGRAMMATIC EVENTS & REQUIREMENTS

- 1. ORIENTATION, Attendance mandatory.
  - Academic advising: throughout enrollment as a student and a candidate in the BMS curriculum students/candidates can consult the Program Director or Program Coordinator.
- 2. PLAN of WORK: Prepare in consultation with Program Director/ Program Coordinator, and file no later than end of second term of full-time enrollment or at least twelve (12) cumulative credits earned. This includes the Petition for Candidacy. (The purpose is to assure that all degree requirements have been identified and plan to be fulfilled.)
- 3. ESSAY: Identify an Essay Advisor, in consultation with Essay Advisor identify an essay topic and develop an essay outline and additional Essay Committee members, then obtain approval of Essay Outline by all Essay Committee members.
- 4. ESSAY: Enroll in BMS7999-Essay in Basic Medical Science. Investigate essay topic and prepare written essay.
- 5. DEGREE: Apply for degree through Academica in term planned to graduate.
- 6. ESSAY: Present Essay document to Committee, modify as required by members.
- 7. ESSAY: Essay Advisor and Committee members prepare and file Essay Final Report; Committee must specify the grade, which will be assigned for BMS7999.
- 8. GRADUATION. Requires prior review and approval by SoM Graduate Programs administration that all degree requirements have been/ will be satisfied by deadline for the specified term.

**BMS CORE COURSES:** Within <u>selected BMS CORE</u> courses that are identified by the MS in BMS Program, a minimum of one (1) BMS CORE course is required in at least four (4) basic medical science disciplines, that include BMB/Biochemistry & Molecular Biology, CB/Cancer Biology, IM/Immunology, MGG/Molecular Genetics & Genomics, PHC/Pharmacology, PSL/Physiology, PTH/Pathology, PYC/Psychiatry & Behavioral Neuroscience.

In addition, an earned grade of at least 'B' is required for a CORE course to qualify to fulfill this requirement. No more than two (2) CORE courses with an earned grade less than 'B' can be repeated.

BMS students are advised that graduate level courses are 7000 and above. Although enrollment in post-baccalaureate 6000 (but not 5000) level is permitted, students are advised to enroll in graduate level (7000 and above) courses over 6000 level post-baccalaureate courses.

BMS ELECTIVE COURSES: BMS Elective courses are <u>selected</u> advanced basic science courses offered by School of Medicine Departments and Programs (ANA/Anatomy, BMS/Basic Medical Science, BMB/Biochemistry & Molecular Biology, CB/Cancer Biology, IM/Immunology, MGG/Molecular Genetics & Genomics, ROC/Radiation Oncology, PHC/Pharmacology, PSL/Physiology, and PYC/Psychiatry & Behavioral Neuroscience). BMS Laboratory and Research courses are limited to a cumulative eight (8) credits earned. In addition, topics and projects in these courses are prohibited from overlapping the BMS7999-Essay in Basic Medical Science topic and from overlapping paid employment.

#### **CORE COURSES**

Department	Course #	Course Name C		Term Offered
ВМВ	7010	General Biochemistry Lecture	4	Fall
СВ	7210	Fundamentals of Cancer Biology	4	Fall
IM	7010	Fundamentals of Immunology	2	Winter
IM	7020	Fundamentals of Microbiology	2	Winter
IM	7030	Molecular Biology of Viruses	2	Winter
MGG	7010	Molecular Genetics & Genomics	4	Fall
РНС/ВІО	7410/7011	Principles of Toxicology	3	Fall
PHC	7010	Introduction of Pharmacology	4	Winter
PSL	7010	Basic Graduate Physiology I	4	Fall
PSL	7030	Basic Graduate Physiology II	4	Winter
PYC	7010	Molecular Neuropsychopharmacology		Fall
BIO	6000	Molecular Cell Biology I	3	Fall
СНМ	6620/7620	Metabolism (in lieu of BMB7010)	3	Fall

#### **ELECTIVE COURSES**

Department	Course #	Course Name	Credits	Term Offered
ANA	7055	Biology of the Eye	3	Fall
	7065	Mechanisms of Ocular Disease I	2	Winter
	7075	Mechanisms of Ocular Disease 2	2	Fall
	7080	Human Embryology	3	Fall
	7260	Special Dissection	2 to 10	Every Term
	7270	Special Projects in Anatomy	2 to 10	Every Term
	7890	Seminar	1	Every Term
	7996	Research	1 to 15	Every Term

вмв	7320	Protein Structure and Function	3		Winter	
	7330	Advanced Molecular Biology	2		Winter	
	•					
BMS	6550	Medical Anatomy for Health Professionals	4		Spring/Summer	
	7800	Special Topics/Projects	1	to 4	Every Term	
	7999	Essays in Basic Medical Sciences	3		Every Term	
СВ	7210	Fundamentals of Cancer Biology	4		Fall	
	7220	Molecular Biology of Cancer Development	4		Winter	
	7240	Molecular Mechanisms of Cancer and Therapy	4		Fall	
	7300	Special Topics in Cancer Biology	1	to 3	Winter	
	7430	Cancer Epidemiology	2		Fall	
	7600	Applied Cancer Biostatistics	2		Winter	
	8910	Applied Cancer Bioinformatics	1		Every even year (	
FPH	7012	Social Justice in Public Health	3	Wint	er	
	7015	Biostatistics	3	Fall, Winter (online), SP/S		
	7020	Biostatistics II (pre-req FPH 7350)	3	Fall		
	7100	Health Care Organization & Administration	3	I	Winter, Spring/Summer	
	7230	Health Program Evaluation	3	Sprin	g/Summer	
	7240	Epidemiology	3	Fall, '	Winter, SP/S	
	7250	Health Data Analytics (pre-req FPH 7350)	3	Sprin	g/Summer	
	7350	Advanced Statistical Programming (pre-req FPH 7015)	2	Wint	Winter	
	7420	Principles of Environmental Health	3	Fall		
	7760	Community Health Education	3	Spring/Summer (Alt. Years)		
	7210	Research Methods for Public Health Professionals (pre-req FPH 7015)	3	Fall, Spring/Summer		
			ı	T		
MM	7450	Current Trends in Immunology	1 to 5	Irreg		
	7650	Current Trends in Host- Microbiome Interactions	2	Irregi	ular 	
			T	1		
MGG	7015	Introduction to Genetics	2	Fall		
	7020	Metabolism and Disease	2		every other year	
	7030	Functional Genomics and Systems Biology	2	Wint	er	
	7040	Molecular Organelle Physiology	2	Wint	er, every other yea	
	7050	Bioinformatics: Theory and Practice	3	Wint	er	
	7100	Biostatistics with R	2	Fall		
	i		i	i		

Molecular Biology of Cellular Signaling

**Advanced Human Genetics** 

7400 7600 2

3

Winter, every other year

Winter

PHC	7240	Principles of Cancer Therapy	2	Irregular
	7650	Advanced Topics in Pharmacology	1 to 3	Every Term
	7700	Recent Developments in Pharmacology	1	Every Term
	7996	Research	1 to 10	Every Term

PSL	5680	Basic Endocrinology	3	Fall
	6010	Physiology of Exercise II	3	Fall
	6300	Biotechnology: Techniques and Applications	2	Fall
	7215	Nanobioscience	3	Winter
	7400	Advanced Respiratory Physiology	2	Every 2 Years (W)
	7420	Organizing & Communicating Hypothesis Testing in Physio	2	Winter
	7550	Advanced Renal Physiology	2	Every 2 years (F)
	7600	Advanced Cardiovascular Physiology	2	Fall
	7640	Cell and Molecular Physiology	3	Every 2 years(W)
	7660	Neurophysiology	3	Every 2 years(F)
	7680	Endocrinology	4	Winter
	7690	Principles and Techniques of Reproductive Biology	3	Every 2 years(F)
	7700	Embryonic Stem Cell Biology	3	Every 2 years (W)
	7710	Disease States and Reproductive Processes	1	Spring/Summer
	7730	Reproductive Sciences: Teratology	3	Every 2 years(F)
	7890	Seminar	1	Fall, Winter
	7880	Special Problems in Physiology	1 to 8	Every Term
	7825	Membrane Physiology	2	Winter
	7775	Current Research Topics in Reproductive Science	1	Fall
			1 to	
	7996	Arranged Research	15	Every Term

PYC	7140	Fundamentals of Neuroimaging	3	Fall
	7150	Fundamentals of Neuropsychiatric Disorders	3	Fall
	7515	Advanced Topics: Imaging, Neurodevelopment, Psychiatric Disorders	3	Every 2 Years (Winter)
	7595	The Gut Microbiome & Translational Neuroscience	3	Every 2 Years (Fall

ROC	6710	Physics in Medicine	3	Winter	
	7000	Imaging Physics	4	Fall	
	7010	Imaging Physics II: Nuclear	2	Winter	
	7020	Physics of Radiation Therapy	3	Winter	
	7040	Radiation Dosimetry	2	Winter	
	7060	Applied Radiobiology in Radiological Science	2	Fall	PREREQUISITES
	7070	Radiation Safety	2	Spring/Summer	ROC 7000
	7080	Radiotherapy Physics Laboratory	2	Spring/Summer	ROC 5010
	7110	Treatment Planning	2	Fall	ROC 5010
	7120	Radionuclide Therapy	2	Fall	
	7130	Nuclear Medicine Physics	2	Spring/Summer	
	7160	Advanced Topics in Medical Physics	2	Winter	ROC7020
	7890	Seminar	1	Fall	ROC7020
	7990	Essay Direction	1 to 5	Every Term	ROC7020
	8990	Special Problems in Radiation	1 to 7	Every Term	ROC7010

# **Example Curricula for the M.S. in Basic Medical Sciences Program**

		21 Month Program	
Semester	Course	<u>Title</u>	Credits
Year 1 - Fall	BMB 7010	General Biochemistry	4
Year 1 - Fall	PSL 7010	Basic Graduate Physiology I	4
Year 1 - Winter	IM 7030	Fundamentals of Immunology	2
Year 1 - Winter	PSL 7030	Basic Graduate Physiology II	4
Year 1 - Winter	PHC 7010	Introduction to Pharmacology	4
Year 2 - Fall	MGG 7010	Molecular Biology and Genetics	4
Year 2 - Fall	Elective	Elective	4
Year 2 - Winter	CB 7210	Fundamentals of Cancer Biology	4
Year 2 - Winter	BMS 7999	Essay In Basic Medical Sciences	3
Year 2 - Winter	Elective	Elective	3

		16 Month Program	
Semester	Course	<u>Title</u>	<u>Credits</u>
Year 1 - Fall	BMB 7010	General Biochemistry	4
Year 1 - Fall	PSL 7010	Basic Graduate Physiology I	4
Year 1 - Fall	PYC 7010	Molecular Neuropsychopharmacology	3
Year 1 - Winter	IM 7030	Fundamentals of Immunology	2
Year 1 - Winter	PSL 7030	Basic Graduate Physiology II	4
Year 1 - Winter	Elective	Elective	3
Year 1 - Spring/Summer	BMS 6550	Human Anatomy for Health Professionals	4
Year 2 - Fall	MGG 7010	Molecular Biology and Genetics	4
Year 2 - Fall	Elective	Elective	3
Year 2 - Fall	BMS 7999	Essay in Basic Medical Sciences	3

#### BMS PLAN of WORK:

During the second term of full-time matriculation each student should (mostly for your own good) complete a Plan of Work and have it approved by the Program Director and Office of Biomedical Graduate Programs administration. The purposes are to permit advancement to Master's degree candidacy and to be assured all MS in BMS degree requirements have been identified and planned to be fulfilled.

#### **BMS ESSAY:**

BMS7999-Essay in Basic Medical Science (3 er) is required. Satisfactory outcome in BMS7999 requires:

- 1. Registration for BMS 7999 course
- 2. Identification of an Essay Advisor; must be WSU School of Medicine Graduate Faculty.
- 3. In consultation with the Essay Advisor, identification of an essay topic and preparation of the Essay Outline.
- 4. In consultation with the Essay Advisor, identification of two Essay Committee members who also must be WSU Graduate Faculty, preferably SOM
- 5. Completion of the ESSAY OUTLINE form. Following review and approval (signatures required) by Advisor and both members, submit to SoM Graduate Programs for approval.
- 6. Completion of the Essay, per requirements specified below.
- 7. The Essay document must be reviewed/ approved by the Essay Advisor and both Committee members (No oral examination/defense is required). In addition, the FINAL REPORT form must be completed & signed (signifying approval) by the Essay Advisor and committee members, with a letter grade assigned. The form along with the final BMS Essay should be submitted to the Office of Biomedical Graduate Programs for final approval and posting of grade. The Essay advisor should confirm that the submission has been run through Unicheck, the online plagiarism check done by the advisor or Office of Biomedical Graduate Programs.

#### **ESSAY ADVISOR & ESSAY TOPIC:**

Each student during the 2<sup>nd</sup> to 3<sup>rd</sup> term of full-time enrollment (following PLAN OF WORK submission, approval, and switch to candidacy), must select an ESSAY ADVISOR. The Essay Advisor must be a member of the WSU School of Medicine Graduate Faculty (listed in the WSU Graduate Bulletin; additional are on file in the Office of Biomedical Graduate Programs) and functions as the student's essay and academic advisor. The Essay Advisor should have expertise in Basic Medical Sciences that the student has interest in expanding their knowledge through the BMS7999 Essay course. The student should meet with the potential Essay Advisor, indicate their general area of interest for the essay, and discuss the faculty member's willingness to be the Essay Advisor, and then identify and consider topics that are suitable for a BMS Essay.

#### **Essay Outline:**

The student then develops an Essay Outline that contains:

- [1] Title of the Essay
- [2] Brief (one to a few sentences) explanation why the subject matter to be covered is important and significant.

[3]Statement (one to a few paragraphs) outlining the scope, identifying resource(s) of information and data for the essay, specifying the problem and/or hypothesis the essay will examine, and explaining relevance to current biomedical research, problems, and issues.

#### **Essay Committee Requirements**

In consultation with the Advisor two additional WSU Graduate Faculty members must be identified who will be on the Essay Committee. These members should have some knowledge in the essay's topic area.

# **Essay Outline Submission/Approval Process**

The candidate must complete the BMS Essay Outline Form. The FORM must contain the essay outline, be signed by the student, approved (signed) by the Advisor and both Committee members, and submitted to the SoM Graduate Programs for approval.

# **Scope of Essay**

Essay, <u>excluding</u> the title page [a], table of contents [b], lists of figures and tables [c], figure(s) and/or table(s) pages [j], reference pages [k], and biographical sketch [l] **should be no more than 20 pages** (8½x11 paper, 1 inch margins, double spaced, portrait, numbered pages).

#### The BMS Essay should have the following structure:

- [a] Cover/title page,
- [b] Table of contents,
- [c] List of figures and List of tables,
- [d] Introduction: state hypothesis or problem and its scope ( $\leq 1$  page).
- [e] Background: state basis for the hypothesis.
- [f] Statement: strategy for the literature study (i.e., methods).
- [g] Body: CRITICAL REVIEW OF SELECTED LITERATURE, the major portion of the essay, should detail the findings with both supportive and negative evidence.
- [h] Discussion: an assessment of the findings in relation to the hypothesis stated in the introduction.
  - [i] A single page summary and conclusions section.
  - [i] Figures and/or Tables.
  - [k] References (full citation with all authors, title and entire pagination).
  - [1] Biographical sketch (academic) of student