GRADUATE STUDENT HANDBOOK

MASTER OF SCIENCE DEGREE PROGRAM IN CLINICAL NUTRITION (MSCN)

Department of Dietetics and Nutrition
4301 W. Markham Street, Mail # 627
Little Rock, AR 72205
501-686-6166

UAMS Graduate School
4301 W. Markham Street, Mail # 601
Little Rock, AR 72205
501-686-5454

University of Arkansas for Medical Sciences
<table>
<thead>
<tr>
<th>Program Description</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeframe</td>
<td>3</td>
</tr>
<tr>
<td>Department Mission Statement and MSCN Program Goals</td>
<td>3</td>
</tr>
<tr>
<td>Program Admission Requirements</td>
<td>4</td>
</tr>
<tr>
<td>Domestic Applicants</td>
<td>4</td>
</tr>
<tr>
<td>International Applicants</td>
<td>4</td>
</tr>
<tr>
<td>Prerequisite Course Requirements</td>
<td>4</td>
</tr>
<tr>
<td>Degree Candidacy Admission</td>
<td>4</td>
</tr>
<tr>
<td>Graduate Credit Transfer</td>
<td>5</td>
</tr>
<tr>
<td>Department Degree Completion Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Thesis Option</td>
<td>6</td>
</tr>
<tr>
<td>Non-Thesis Option</td>
<td>6</td>
</tr>
<tr>
<td>Emphasis Areas within the MSCN Degree Program – Specialty Courses</td>
<td>8</td>
</tr>
<tr>
<td>University Graduation Requirements</td>
<td>8</td>
</tr>
<tr>
<td>Degree Plan for MSCN Degree</td>
<td>9</td>
</tr>
<tr>
<td>Model Plan for Full-Time Students</td>
<td>10</td>
</tr>
<tr>
<td>MSCN Student Degree Planner Sheet (example)</td>
<td>11</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>12</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>15</td>
</tr>
<tr>
<td>Factors Influencing Elective Courses</td>
<td>15</td>
</tr>
<tr>
<td>Policies and Procedures</td>
<td>16</td>
</tr>
<tr>
<td>Transfer of Credit Hours to MSCN Program</td>
<td>16</td>
</tr>
<tr>
<td>Handling Course- and/or Program-Related Issues</td>
<td>17</td>
</tr>
<tr>
<td>Choosing Advisors</td>
<td>17</td>
</tr>
<tr>
<td>NUTR 5103: Independent Study in Clinical Nutrition</td>
<td>18</td>
</tr>
<tr>
<td>NUTR 5116: Advanced Clinical Practicum</td>
<td>19</td>
</tr>
<tr>
<td>Written Comprehensive Examination</td>
<td>21</td>
</tr>
<tr>
<td>Thesis Option</td>
<td>23</td>
</tr>
<tr>
<td>Non-Thesis Option</td>
<td>26</td>
</tr>
<tr>
<td>Tips on Planning Thesis/Non-Thesis Project</td>
<td>28</td>
</tr>
<tr>
<td>Frank McGehee Travel Award for MSCN Students</td>
<td>29</td>
</tr>
<tr>
<td>Evaluations</td>
<td>30</td>
</tr>
<tr>
<td>Recent Student Publications</td>
<td>31</td>
</tr>
<tr>
<td>Frank McGehee Travel Award Form</td>
<td>33</td>
</tr>
<tr>
<td>Tips on Thesis/Non-Thesis Project Tear Out Page</td>
<td>34</td>
</tr>
<tr>
<td>Thesis Advisory Committee Form</td>
<td>35</td>
</tr>
<tr>
<td>UAMS Graduate School Student Advisory Committee Report Form</td>
<td>36</td>
</tr>
<tr>
<td>Handbook Signature Page</td>
<td>37</td>
</tr>
</tbody>
</table>
Program Description:
The Department of Dietetics and Nutrition in the College of Health Professions (CHP) of the University of Arkansas for Medical Sciences (UAMS) offers graduate work leading to a Master of Science degree in Clinical Nutrition (MSCN) through the UAMS Graduate School. The program is designed to prepare health professionals and registered dietitians/registered dietitian nutritionists to practice as advanced level practitioners. Other health professionals may participate in this program to enable them to practice as nutrition specialists within their professional arenas. Graduates of science programs may also use the program to develop research skills in nutrition.

The student may elect one of four areas of emphasis as a specialty: Community Nutrition; Geriatric Nutrition; Nutrition in Health, Wellness and Sports; or Pediatric Nutrition. A combination of one or more areas may be done to meet an individual’s special interest. The student has a choice of a thesis option or a non-thesis option.

Time-Frame:
The program is designed to be completed over two years in full-time student status. The program may be completed over a maximum of a five-year period on a part-time basis. All students are expected to complete 30-33 semester hours of coursework, plus 3-6 semester hours of research for a total of 36 hours. All students must successfully complete a written comprehensive examination and an oral defense of their research to the faculty, other students, and other healthcare professionals in order to complete the program.

Department Mission Statement and MSCN Program Goals:
The mission and goals of the Department of Dietetics and Nutrition and the MSCN program reflect the missions and goals of the UAMS (http://www.uams.edu/), the UAMS Graduate School (http://gradschool.uams.edu/), and the CHP (http://healthprofessions.uams.edu/).

The mission of the Department of Dietetics and Nutrition is to provide education, research, and service by:

- Educating advanced-level practitioners in clinical nutrition and dietetics as educators, researchers, and clinical specialists;
- Providing initial and continuing education opportunities in clinical nutrition and dietetics for health care professionals;
- Developing and applying new knowledge and techniques in clinical nutrition and dietetics;
- Advancing nutritional care and health status, especially for Arkansans.

MSCN Program Goals:

- To prepare graduates to practice with excellence at an advanced or specialized level;
- To expand the knowledge base and application of new technology to the practice of dietetics and clinical nutrition;
- To develop and apply research skills to enhance the practice of dietetics and nutrition;
- To provide nutrition education opportunities to health professional students and practitioners in the State of Arkansas;
- To advance nutrition knowledge and practice skills applicable to institutions, industry, communities, and individuals in the State of Arkansas;
- To serve as advocates for better health through incorporation of sound nutrition principles and practice in policies and programs;
- To provide the knowledge and skills for career development and promotion.

Revised 07/2017
PROGRAM ADMISSION REQUIREMENTS

Admission to the MSCN degree program includes the completion of a baccalaureate degree and other requirements of the UAMS Graduate School. The program applicant must apply for admission to the UAMS Graduate School.

MSCN program requirements for domestic applicants include:

- Curriculum Vitae (CV) or Resume
- A Statement of Purpose, limited to 1,000 words, addressing:
  - Why you are interested in the program
  - Experiences that have prepared you for the program
  - Short-term goals
  - Long-term goals
  - Strengths and weaknesses or areas of improvement
- Cumulative grade point average (GPA) of at least 2.85 on a 4.0 scale
- Satisfactory score on the Graduate Record Examination (GRE)
- Three reference letters from an undergraduate or post-baccalaureate professor or employer.

MSCN program requirements for international applicants include all items listed above for domestic applicants plus the following:

- Official transcripts from every college and/or university attended authenticated for a 4.0 scale
- A TOEFL score of 79
- An Affidavit of Support according to the graduate school website.

Prerequisite Course Requirements:
While the program is designed primarily for students coming from a foods and nutrition or dietetics background, other health professionals and science graduates may qualify for the program. Three basic prerequisite courses or their equivalent are required for admission and include:

- basic human nutrition*
- biochemistry in nutrition science* or physiological chemistry
- medical nutrition therapy* (or diet in disease).

*For deficient students, these three courses are offered online through the Department of Dietetics and Nutrition.

Degree Candidacy Admission:
Any admission contingencies are to be met before completion of the first 12 hours of graduate credit. To be accepted in a program of study (degree program) leading to a graduate degree, the applicant must be recommended by the Chair of the Department offering that degree, and to continue in that program, must make a cumulative grade-point average of 3.0 (A = 4.0) on the first 12 hours of graduate-level work in that degree program and meet any other conditions that may be specified by the faculty of the department in question. For admission contingencies to be met the student must provide her/his advisor (please see the Choosing Advisors section on page 17) with needed documentation. The advisor will review the documentation and submit to the Department Chair with a recommendation for full admission status if all

Revised 07/2017
contingencies are met. The Department Chair will submit a letter of recommendation for removal of contingencies to the Dean of the Graduate School.

**Graduate Credit Transfer:**
The MSCN Admissions Committee may consider a student’s request to transfer a maximum of six (6) elective hours from another recognized graduate school in the United States. The MSCN Admissions Committee will determine the appropriateness of transfer credit for elective courses. Graduates of the UAMS/CAVHS Dietetic Internship may transfer 12 hours of graduate credit from the internship program to the MSCN Program. (Please see pages 16-17 in the Policies and Procedures section for further details regarding transfer of graduate credit hours)
Department Degree Completion Requirements:
The program requires a total of 36 semester hours of coursework.

The thesis option consists of 30 hours of coursework and six (6) hours of thesis credit. The thesis will follow the Graduate School guidelines for a UAMS thesis; the final product is a thesis submitted to the UAMS Library. Degree requirements for students completing the thesis option include:

- Six (6) hours of master’s thesis (NUTR 5121)
- 27 hours of required courses
- Three (3) hours of supportive/elective courses

Thesis hours (NUTR 5121) are taken over two or more semesters. A thesis grade will not be submitted until after the thesis defense has been successfully completed. Please see pages 23-25 in the Policies and Procedures section for further details regarding the thesis option.

The non-thesis option consists of 33 hours of coursework and three (3) hours of research credit. The final product is a written research project report submitted to the Department Chair and faculty research committee members. Degree requirements for students completing the non-thesis option include:

- Three (3) hours of research (NUTR 5101)
- 27 hours of required courses
- Six (6) hours of supportive/elective courses

Research in Nutrition hours (NUTR 5101) are taken over two or more semesters to complete requirements for terminal research project. A grade in NUTR 5101 Research in Nutrition will not be submitted until after the project defense has been successfully completed. Please see pages 26-27 in the Policies and Procedures section for further details regarding the non-thesis option.

All students are required to:

- **Pass a written comprehensive examination** over the designated required courses. A grade will not be submitted until after the exam has been successfully completed. The comprehensive examination must be completed prior to completing a thesis or research project paper. Please see pages 21-22 in the Policies and Procedures section for details regarding the comprehensive examination.

- **Defend the thesis/non-thesis** research findings in an oral presentation. Please see page 24 (#9) and page 27 (#4) in the Policies and Procedures section for details regarding the oral defense for the thesis/non-thesis options.
  - Students do not own research project data; students must obtain faculty permission for publication and/or dissemination of data relating to research projects.

- **Submit an abstract** of research findings formatted for a National Meeting, such as the Experimental Biology (EB) or the Food and Nutrition Conference and Expo (FNCE) annual conferences. All names of the student’s faculty research committee, thesis or non-thesis, will be listed as co-authors on abstract submissions.
  - **Student Research Manuscript Submission Guidelines:**
While manuscript submission is not a requirement for completion of the MSCN program, any manuscripts stemming from project completion will follow these guidelines:

- The research advisor will ask the student in writing (email) whether or not she/he will take lead in writing a manuscript under supervision of the research advisor. The research advisor will determine order of authorship and co-authors included on the manuscript.

- Complete a Graduate Exit Survey for the Department
Emphasis Areas within the MSCN Degree Program – Specialty Courses:
Students are required to select and develop particular skills in one of four areas of emphasis. All students are required to complete one course in an area of emphasis:

- NUTR 5113 Geriatric Nutrition
- NUTR 5114 Pediatric Nutrition
- NUTR 5115 Nutrition in Health, Wellness and Sports
- NUTR 5117 Community Nutrition

University Graduation Requirements:
In completing the following the steps, the student will meet the requirements for graduation.

1. The Department Chair will send a letter or email to the Dean of the Graduate School noting the date the student successfully passed the written comprehensive examination.

2-A. For Thesis, a letter from the Library stating the thesis has been accepted into the UAMS Library is required. The final and approved thesis must be submitted to the Library at least 10 working days prior to graduation. Copies of the accepted version of the thesis will be distributed to each member of the thesis committee and the Department Chair. Upon receipt of written notification for the successful thesis completion from the advisor, the Department Chair will send a formal letter to the Dean of Graduate School.

2-B. For Non-Thesis, a final copy of the written project report will be submitted to the Department Chair as well as each member of the Committee within 10 working days prior to graduation. The Department Chair will send written notification (letter or email) to the Dean of the Graduate School stating the requirements have been met.

3. An abstract of research findings formatted for a National Meeting, such as the Experimental Biology (EB) or the Food and Nutrition Conference and Expo (FNCE) annual conferences submitted to the advisor. The advisor will submit the abstract on behalf of the student. All faculty research committee members will be included as co-authors.

4. UAMS Clearance: Students are expected to go through a UAMS Clearance Procedure involving designated areas specified by the UAMS Graduate Office. Areas may include: Treasurer’s Office, Security/Parking, Library, and Department Chair. The student should allow ample time to visit each place to obtain needed signatures; multiple sites can take half a day. The final stop will be human resources. Please visit the University Registrar Office located on the grounds of the College of Health Professions in Building 2 for additional details regarding the UAMS clearance process.

5. Fees. Degrees or transcript copies cannot be released until all fees are paid in full, including graduation fees, health care, library fines, security/parking violations, and all UAMS properties, e.g. keys and badges are returned.

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DEGREE PLAN FOR THE MASTER OF SCIENCE DEGREE IN CLINICAL NUTRITION:

**^THESIS**
30 hrs didactic, 6 hrs thesis

**^NON-THESIS**
33 hrs didactic, 3 hrs research

Code:  F = Fall,  S = Spring,  Su = Summer

**REQUIRED COURSES:**

* NUTR 5110 (formerly 5103) Nutrition and Metabolism (Macro)  F  3hrs
* NUTR 5106 (formerly 5153) Nutrition and Metabolism (Micro)  S  3 hrs
* NUTR 5107 (formerly 5033) Advanced Clinical Nutrition  S  3 hrs
  or
* NUTR 5104 (formerly 5143) Nutrition Research & Statistical Methods  Vary  1 hrs
* NUTR 5102 (formerly 5032) Assessment of Nutritional Status  F  2 hrs
* NUTR 5111 (formerly 5112) Nutrition Counseling  S  2 hrs
* NUTR 5112 (formerly 5161) Advanced Nutrition Seminar  Vary  1 hrs
* NUTR 5103 (formerly 509V) Independent Study in Nutrition  Vary  1 hrs
* NUTR 5116 (formerly 523V) Advanced Clinical Practicum  Vary  3 hrs
* BIOS (formerly PBHL) 5013 Biostatistics I - Others: As approved by advisor  F/Su  3 hrs
* Specialty Courses:  (Choose one of the following based on area of emphasis)  3 hrs
  NUTR 5117 (formerly 5243) Community Nutrition  F
  NUTR 5113 (formerly 5203) Geriatric Nutrition  S
  NUTR 5115 (formerly 5223) Nutrition in Health, Wellness and Sports  S
  NUTR 5114 (formerly 5213) Pediatric Nutrition  F

**SUPPORTIVE & ELECTIVE COURSES** (suggested, not inclusive):

EPID 5112 (formerly PBHL 5173) Epidemiology I  S  3 hrs
NUTR 5120 (formerly 551V) Special Topics in Clinical Nutrition  OD  1-3 hrs
NUTR 5108 (formerly 5043) Diet and Cancer Prevention  F  3 hrs

**THESIS (T) OR NON THESIS (NT):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5121 (formerly 600V) (Thesis) Master’s Thesis in Clinical Nutrition</td>
<td>Vary</td>
<td>6 hrs</td>
</tr>
<tr>
<td>NUTR 5101 (formerly 608V) (Non-Thesis) Research in Nutrition</td>
<td>Vary</td>
<td>3 hrs</td>
</tr>
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</table>

**TOTAL HOURS:**

36 HOURS

**DEPARTMENTAL PREREQUISITES OFFERED:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5109 (formerly 5063) Medical Nutrition Therapy</td>
<td>Su</td>
<td>3 hrs</td>
</tr>
<tr>
<td>DIET (formerly NUTR) 4123 Biochemistry in Nutrition</td>
<td>Vary</td>
<td>3 hrs</td>
</tr>
<tr>
<td>NUTR 2100 Basic Human Nutrition</td>
<td>Vary</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

* Upon enrollment in either thesis credit or research project credit, the student is committed to completion in that option.
* Required Courses covered on the Comprehensive Examination (please see the Policies and Procedures section page 21).
* OD: courses are offered On Demand.

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### MODEL PLAN OF STUDY FOR FULL-TIME THESIS STUDENT*

<table>
<thead>
<tr>
<th>FALL I</th>
<th>SPRING I</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5110 Nutrition and Metabolism (Macro)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5106 Nutrition and Metabolism (Micro)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5102 Assessment of Nutritional Status</td>
<td>2 hr.</td>
</tr>
<tr>
<td>NUTR 5107 Advanced Clinical Nutrition NUTR 5114 or NUTR 5117</td>
<td>3 hr.</td>
</tr>
<tr>
<td>5104 Nutrition Research and Statistical Methods</td>
<td>3 hr.</td>
</tr>
<tr>
<td>BIOS 5013 Biostatistics I</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5111 Nutritional Counseling</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Specialty Course (NUTR 5113 or NUTR 5115)</td>
<td>3 hr.</td>
</tr>
</tbody>
</table>

| 8-11 | 11-14 |

<table>
<thead>
<tr>
<th>FALL II</th>
<th>SPRING II</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5116 Advanced Clinical Practicum</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5112 Advanced Nutrition Seminar</td>
<td>1 hr.</td>
</tr>
<tr>
<td>NUTR 5103 Independent Study in Nutrition</td>
<td>1 hr.</td>
</tr>
<tr>
<td>NUTR 5121 (Thesis)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5121 (Thesis)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>Elective</td>
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</tbody>
</table>

| 10 | 4-7 |

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### MODEL PLAN OF STUDY FOR FULL-TIME NON-THESIS STUDENT*

<table>
<thead>
<tr>
<th>FALL I</th>
<th>SPRING I</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5110 Nutrition and Metabolism (Macro)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5106 Nutrition and Metabolism (Micro)</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5102 Assessment of Nutritional Status</td>
<td>2 hr.</td>
</tr>
<tr>
<td>NUTR 5107 Advanced Clinical Nutrition NUTR 5114 or NUTR 5117</td>
<td>3 hr.</td>
</tr>
<tr>
<td>5104 Nutrition Research and Statistical Methods</td>
<td>3 hr.</td>
</tr>
<tr>
<td>BIOS 5013 Biostatistics I</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5111 Nutritional Counseling</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Specialty Course (NUTR 5113 or NUTR 5115)</td>
<td>3 hr.</td>
</tr>
</tbody>
</table>

| 8-11 | 11-14 |

<table>
<thead>
<tr>
<th>FALL II</th>
<th>SPRING II</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5116 Advance Clinical Practicum</td>
<td>3 hr.</td>
</tr>
<tr>
<td>NUTR 5112 Advanced Nutrition Seminar</td>
<td>1 hr.</td>
</tr>
<tr>
<td>NUTR 5103 Independent Study in Nutrition</td>
<td>1 hr.</td>
</tr>
<tr>
<td>NUTR 5101 (Non-Thesis)</td>
<td>2 hr.</td>
</tr>
<tr>
<td>NUTR 5101 (Non-Thesis)</td>
<td>2 hr.</td>
</tr>
<tr>
<td>Elective</td>
<td>3 hr.</td>
</tr>
</tbody>
</table>

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*These plans of study represent model plans for full-time students; optional plans providing flexibility are available on an individual basis for working/non-traditional students requiring a longer time-frame for completion of the MSCN degree program.*

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MSCN STUDENT DEGREE PLANNER SHEET

Name: __________________________
Phone: __________________________
E-Mail: __________________________

Transfer Student: ☐ Yes ☐ No  Transfer Hours: ________________

Transfer Information: __________________________

UAMS/CAVHS to MSCN Transfer Letter: ☐ Yes ☐ No  Date Sent: __________

Transfer Courses for UAMS/CAVHS Graduates:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Description</th>
<th>Semester</th>
<th>Year Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 5073</td>
<td>Practicum in Clinical Dietetics</td>
<td>Fall / Spring</td>
<td></td>
</tr>
<tr>
<td>DIET 5083</td>
<td>Practicum in Administrative Dietetics</td>
<td>Fall / Spring</td>
<td></td>
</tr>
<tr>
<td>DIET 5112</td>
<td>Nutrition Counseling</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>DIET 5161</td>
<td>Advanced Nutrition Seminar</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>DIET 5333</td>
<td>Advanced Clinical Dietetics</td>
<td>Fall</td>
<td></td>
</tr>
</tbody>
</table>

OTHER APPROVED TRANSFERS:

*: Required Courses  T-DI: Transfer Course from DI Program  SE: Specialty Emphasis (Only 1 Required)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Description</th>
<th>Semester</th>
<th>Year Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 5110</td>
<td>Macronutrients</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5106</td>
<td>Micronutrients</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5107</td>
<td>Advanced Clinical Nutrition</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>DIET 5333</td>
<td>Advanced Clinical Dietetics</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5102</td>
<td>Assessment of Nutritional Status</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5111</td>
<td>Nutrition Counseling</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5104</td>
<td>Nutrition Research and Stat Methods</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5112</td>
<td>Advanced Nutrition Seminar</td>
<td>Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5103</td>
<td>Independent Study in Clinical Nutrition</td>
<td>Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5116</td>
<td>Advanced Clinical Practicum</td>
<td>Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>BIOS 5013</td>
<td>Biostatistics I</td>
<td>Fall/Summer</td>
<td></td>
</tr>
<tr>
<td>NUTR 5121</td>
<td>Master’s Thesis in Clinical Nutrition</td>
<td>Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5101</td>
<td>Research in Nutrition</td>
<td>Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5108</td>
<td>Diet and Cancer Prevention</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5105</td>
<td>Principles of Advanced Nutrition Support</td>
<td></td>
<td></td>
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<tr>
<td>NUTR 5113</td>
<td>☐ SE Geriatric Nutrition</td>
<td>Spring</td>
<td></td>
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<tr>
<td>NUTR 5114</td>
<td>☐ SE Pediatric Nutrition</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5115</td>
<td>☐ SE Nutrition in Health, Wellness and Sports</td>
<td>Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5117</td>
<td>☐ SE Community Nutrition</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>NUTR 5120</td>
<td>Special Topics in Clinical Nutrition</td>
<td>Fall / Spring</td>
<td></td>
</tr>
<tr>
<td>NUTR 5122</td>
<td>Clinical Nutrition Special Project</td>
<td>Fall / Spring</td>
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</tr>
</tbody>
</table>

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COURSE DESCRIPTIONS:

NUTR 2100 Basic Human Nutrition
This course provides an integrated overview of the physiological requirements and functions of protein energy and the major vitamins and minerals that are determinants of health and diseases. This includes: an understanding of nutrients, digestion and absorption, effects of nutrient deficiencies, requirements, food sources, nutrient interactions, dietary guidelines, and food safety. There are no prerequisites for this course.

DIET (formerly NUTR) 4123 Principles of Biochemistry in Nutrition
This online course, students will gain an understanding of the basic concepts of biochemistry which is essential for their career in any area of nutrition. This includes: an understanding of the major biomolecules affecting nutrition and found in living organisms, the control and regulation of protein structure and function, enzyme kinetics, nucleic acid, lipids and membrane transport, biochemical evolution and carbohydrates and metabolism. Prerequisites: working knowledge of basic chemistry and basic nutrition, or consent of faculty. (3 credits)

NUTR 5102 (formerly 5032) Assessment of Nutritional Status
Study of nutritional assessment systems and methodology including the latest technology in dietary, biochemical, anthropometric, and clinical evaluation. Emphasis placed on design of systems, interpretation of indices for all age groups in health and disease, and application of data in nutrition consultation. Prerequisites: Undergraduate courses in biochemistry, anatomy, physiology, nutrition, food science or equivalents. (2 Credits)

NUTR 5107 (formerly 5033) Advanced Clinical Nutrition
Integration of principles of biochemistry, physiology, pathology, anatomy, psychology, anthropology, epidemiology, nutrition and food science into therapeutic use of foods and nutrients in disease prevention and treatment through a case-oriented approach. Prerequisites include Biochemistry, Diet in Disease, Anatomy and Physiology, or consent of faculty; DIET 5333 in the Dietetic Internship program may be substituted for this course. (3 Credits)

NUTR 5108 (formerly 5043) Diet and/or Cancer Prevention
Focused on clinical and preclinical studies that address how dietary related factors, such as nutrients, bioactive food components and obesity, influence cancer development and cover major mechanisms by which dietary factors modify cancer risk. Prerequisites: A previous course in nutrition, biology, biochemistry, or physiology, or consent of faculty. (3 Credits)

NUTR 5109 (formerly 5063) Medical Nutrition Therapy
Online course introducing nutrition as a medical specialty from the perspective of disease prevention and treatment including assessment, patient interviewing strategies, medical terminology, nutrition care plan techniques, and prevention strategies. Prerequisites: a course in nutrition and in organic biochemistry, physiology or equivalent, or consent of faculty. (3 Credits)

NUTR 5103 (formerly 509V) Independent Study in Clinical Nutrition (1-6)
(See page 18 for additional information regarding this course)
This option may be used by students seeking to define a thesis topic or to pose a research question about a specific aspect of clinical nutrition. The student will prepare a written report following designated guidelines. (Variable Credits, Research)

Revised 07/2017
NUTR 5110 (formerly 5103) Nutrition and Metabolism Macronutrients
Reviews cell function, including acid base, utilization of nutrients in metabolic processes, and roles of specific nutrients in human metabolism. Physiology and organ systems function as related to nutrition will also be addressed. Alterations in metabolic processes caused by specific diseases will be discussed. (3 Credits)

NUTR 5111 (formerly 5112) Nutrition Counseling
Provides an understanding of the methods, strategies, and evaluation techniques of nutrition and diet counseling. Learning styles, nutritional anthropology, and instructional technology are applied in the health care setting. Prerequisite: NUTR 5107 or DIET 5333, or consent of faculty. (2 Credits)

NUTR 5105 (formerly 5122) Principles of Advanced Nutrition Support
Advanced study in the art and science of nutrition support explored through a comprehensive review of the literature; discussion of the biochemical, physiological, and medical aspects of nutrition support; and application of these principles in clinical practice through case study presentation. Students participate in literature analysis and case discussions. Prerequisites: one of the following courses or equivalents NUTR 5107, DIET 5333, NUTR 5110, NUTR 5102, or consent of faculty. (2 Credits)

NUTR 5104 (formerly 5143) Nutrition Research and Statistical Methods
A study of research designs, statistics, and data collection methods used in nutrition research. Emphasis on planning metabolic, epidemiological, educational, and clinical studies including food composition and nutritional assessment surveys with basic and advanced statistical applications. Prerequisite: Graduate level course in Statistics or consent of faculty. (3 Credits)

NUTR 5106 (formerly 5153) Nutrition and Metabolism Micronutrients
This course reviews the roles of vitamins, minerals, and trace elements in metabolic processes, and their roles in human metabolism. Alterations in metabolic processes caused by specific vitamin deficiency diseases will be discussed. Metabolism of common drugs and drug-nutrient interactions will be reviewed. Prerequisite: NUTR 5110 or equivalent, or consent of faculty. (3 Credits)

NUTR 5112 (formerly 5161) Advanced Nutrition Seminar
Graduate seminar of important current research in clinical nutrition to reflect content, application to clinical practice, and study parameters and design. Students will read original papers, write critiques, and make presentations for discussion. (1 Credit)

NUTR 5113 (formerly 5203) Geriatric Nutrition
Examines the relationships between nutrition and physiologic aging. The impact of aging on nutritional requirements, effects of chronic and acute disease, effects of nutrition on the aging process, and nutrition programs for older adults are explored. Students will actively analyze and discuss research literature. Prerequisite: one of the following courses NUTR 5110, NUTR 5106, NUTR 5107, DIET 5333, or consent of faculty. (3 Credits)

NUTR 5114 (formerly 5213) Pediatric Nutrition
This course describes the relationship of growth and development to nutrient requirements, from infancy to adolescence. The assessment of feeding practices, food habits, and nutritional status in growth problems, health and diseases will be discussed. Nutritional interventions and therapies for specific conditions will be planned. Prerequisites: one of the following courses NUTR 5110, NUTR 5106, NUTR 5107, DIET 5133, or consent of faculty. (3 Credits)

Revised 07/2017
**NUTR 5115 (formerly 5223) Nutrition in Health, Wellness and Sports**
This course describes the application of advanced principles of normal and preventive nutrition to health and fitness, physical performance, disease prevention, and health promotion in dietetic practice. It relates clinical research in exercise physiology to decision making in wellness and sports nutrition counseling. Prerequisites: one of the following courses NUTR 5110, NUTR 5106, NUTR 5107, DIET 5333, or consent of faculty. (3 Credits)

**NUTR 5116 (formerly 523V) Advanced Clinical Practicum**
(See page 19 for additional information regarding this course)
Based on individual needs and prior clinical experiences, the student may elect an area of advanced clinical nutrition practice for in-depth experiences after determining goals, objectives, and major experiences desired. Prerequisites: NUTR 5107 or DIET 5333, NUTR 5110, NUTR 5102, NUTR 5111, or consent of faculty. (3 Credits)

**NUTR 5117 (formerly 5243) Community Nutrition**
This advanced-level course will provide the student with a framework to approach, analyze, and work with the community nutrition problems. The needs of different populations and resources within the community will be discussed. This course will cover nutritional needs assessment, nutritional education and public policy. Prerequisites: one of the following courses NUTR 5110, NUTR 5106, NUTR 5107, DIET 5333, or consent of faculty. Off-site activities will be necessary to fulfill requirements for this course. (3 Credits)

**DIET (formerly NUTR) 5333 Advanced Clinical Dietetics**
Integration of scientific principles of nutrition and food science into the use of foods and nutrients in disease prevention and treatment in accordance with clinical competencies for the entry-level dietitian. Co-requisite: Admission to Dietetic Internship. Consent of faculty. (3 Credits)

**NUTR 5120 (formerly 551V) Special Topics in Clinical Nutrition**
Advanced work in selected topics of current interest and investigation in clinical nutrition. Topics might include new research and guidelines in the use of nutrition or selected nutrients to prevent or treat a specific disease state such as diabetes, digestive diseases, osteoporosis, obesity, or cardiovascular diseases. (1-3 Credits)

**NUTR 5121 (formerly 600V) Master's Thesis in Clinical Nutrition (1-6)**
Under supervision of graduate faculty, an original research study will be designed and conducted with written thesis following Graduate School guidelines. Prerequisite: consent of faculty

**NUTR 5101 (formerly 608V) Research in Nutrition (1-10)**
Completion of a capstone nutrition research project under direction of faculty advisor and non-thesis project committee. Minimum of three hours required. Grade of “IP” until at least three hours are completed and defended. Prerequisite: completion of, or concurrent enrollment in, all required courses in Clinical Nutrition. Co-requisite: approval of project advisor.

**NUTR 5122 (formerly 601V) Clinical Nutrition Special Project (1-3)**
Students will participate in a research project under the supervision of a faculty member.
ELECTIVE COURSES:
Electives may be taken within or from outside the Department of Dietetics and Nutrition.

Electives available within the Department of Dietetics and Nutrition are:
- NUTR 5105  Principles of Advanced Nutrition Support
- DIET 5073  Practicum in Clinical Dietetics (UAMS/CAVHS Interns only)
- DIET 5083  Practicum in Administrative Dietetics (UAMS/CAVHS Interns only)
- NUTR 5108  Diet and Cancer Prevention
- NUTR 5120  Special Topics in Clinical Nutrition

Factors Influencing Elective Courses:
- Depending on option chosen – thesis or non-thesis, the number of elective course credit hours will vary.
- Up to a total of six (6) graduate credits from another recognized graduate school in the United States may transfer toward elective course credit hours, provided the grades are “B” or better and the subjects are acceptable as part of the student’s program, as determined by the appropriate department procedures.
Transfer of Credit into Master of Science Degree Program in Clinical Nutrition

Policy:
The University of Arkansas for Medical Sciences will permit up to a total of six (6) graduate credits from another recognized graduate school in the United States to be transferred toward elective course credit hours, provided the grades are “B” or better (4.0 scale) and the subjects are acceptable as part of the student’s program, as determined through appropriate department procedures.

The Department of Dietetics and Nutrition will permit a student to transfer 12 hours of graduate credit from the UAMS/CAVHS Dietetic Internship upon completion of that program and upon admission into the MSCN program. A graduate of the UAMS/CAVHS Dietetic Internship program may apply for admission to the MSCN program; the Chair will petition on behalf of the student, to the Dean of the Graduate School to accept a transfer of the 12 credit hours from the internship program.

A student may be admitted concurrently into both the MSCN and Dietetic Internship programs. If concurrently admitted, the student may transfer up to a total of six (6) hours of graduate credit from another recognized graduate school in the United States toward elective course credit hours; an additional 12 hours of graduate credit from the UAMS/CAVHS Dietetic Internship may be applied toward the MSCN degree, provided the grades are “B” or better (4.0 scale) and the subjects are acceptable to the department’s faculty.

To request the transfer of 12 credit hours to be transferred from the UAMS/CAVHS Dietetic Internship to the MSCN graduate program the student must contact the offices of the CHP and complete the transcript request form. An electronic transcript request form is available on the CHP website at the following link: https://secure.uams.edu/CHP/TranscriptRequest/feature/requests/request.aspx.

A student who has previously been admitted to the MSCN degree program and then is admitted to the Dietetic Internship program may have the internship credit incorporated into the MSCN degree plan and will enroll in all DI required courses. Post internship, the MSCN degree advisor and student will mutually agree upon the specific degree plan to complete the MSCN degree.

Procedures:
Upon admission to the MSCN degree program, the student and an academic advisor will meet to develop a degree plan including discussion of any previous coursework for which a transfer of credit might be requested. All previous graduate coursework as shown on all official transcripts will be reviewed. The graduate coursework that meets the student’s degree goals will be considered for transfer credit by the Department Committee.

1. The student will prepare a letter to the Department Chair requesting transfer of credit, providing all necessary details such as name of college, name of course, course number, semester or quarter in which course was taken, and the grade received in the course. The letter will be co-signed by the academic advisor.

2. The Department Admission Committee meets to determine if courses are appropriate to transfer as elective courses.
3. If approved by the Department Admission Committee, the Department Chair will write an official cover letter or email to the Dean of the Graduate School recommending acceptance of the transfer of credits for the designated elective course(s) not to exceed six hours of credit from another recognized graduate school or 12 hours of credit from the UAMS/CAVHS Dietetic Internship program.

4. The Department Chair will receive notification from the Dean of the Graduate School by letter or email indicating the acceptance or rejection of the request and will notify the student.

**Handling Course- and/or Program-Related Issues:**

For course-related issues, the student must contact the course instructor. If the issue is not resolved with the course instructor, the student may contact the Department Chair. If the issue remains unresolved, the student may contact the Dean of the Graduate School.

For program-related issues, the student must contact the Department Chair. If the issue remains unresolved, the student may contact the Dean of the Graduate School.

The UAMS Graduate School has a Grievance Policy and Procedures for addressing student grievances. “A ‘grievance’ means a dispute concerning the status, rights, benefits, obligations and responsibilities of a student, including the availability of services for that student, under established UAMS programs and activities pursuant to regulations, policies and practices of the university.” – Please see the Graduate School Student Handbook for additional information regarding the grievance policy and procedures.

**Choosing Advisors**

- **Academic Advisor**
  - A student must choose an academic advisor within the department during her/his first semester in the MSCN program
  - **Signature Page**
    - Located on the last page of this handbook
    - A student must return the signed signature page to her/his academic advisor before the end of her/his first semester in the MSCN program
    - A student cannot register for the next (second) semester until returning the signed signature page to her/his academic advisor

- **Research Advisor**
  - A student must choose a research advisor within the department prior to enrolling in NUTR 5104 Nutrition Research & Statistical Methods
NUTR 5103: Independent Study in Clinical Nutrition
This option may be used by students seeking to define a thesis topic or to pose a research question about a specific aspect of clinical nutrition. The student will prepare a written report following designated guidelines.

Policy:
This course focuses on development of skills/knowledge regarding a research related component expected for use by the student to complete the research requirement for the MSCN degree program, such as a method of data collection. The student is expected to plan approximately 45 hours for the one (1) semester hour of credit (a semester is 15 weeks of regular classes, each one-hour of semester credit reflects 15 classroom hours or 45 “study” hours).

The student will work with her/his course instructor (advisor) to establish course learning activities, goals and objectives, and a timeline for completion. The student shall propose course goals and objectives in writing; the instructor will review these plans with the student and offer suggestions for specific learning activities to demonstrate achievement of these goals and objectives. Methods of evaluation and demonstration will also be determined mutually. A written report submitted in a binder that includes the goals, objectives, learning outcomes and log of the time spent on each activity will be assessed by the instructor at the end of the semester to determine the student’s grade for the course.

The course emphasis is on the development and demonstration of advanced and expanded understanding/skills relating to the research process. The student may apply hours spent conducting literature searches, attending relevant scientific meetings/continuing education presentations, as part, but not all, of the required hours for the course.

NUTR 5103: Independent Study in Clinical Nutrition Guidelines:
1. Meet with advisor to discuss a research related component to address during the independent study.
2. Develop goals and learning objectives and gain approval from advisor.
3. Identify learning activities.
4. Implement approved independent study plan including learning activities, objectives, evaluation methods, and learning outcomes.
5. Log activities or develop written papers on goal/objective achievement.
6. Submit completed independent study report binder that includes: goals, learning objectives, time log, learning outcomes, conclusion and/or other material in a binder to advisor who will assign a letter grade.

Revised 07/2017
NUTR 5116: Advanced Clinical Practicum

Based on individual needs and prior clinical experiences, the student may elect an area of advanced clinical nutrition practice for in-depth experiences after determining goals, objectives, and learning activities. Prerequisites: NUTR 5107 or DIET 5333, NUTR 5110, NUTR 5102, NUTR 5111, or consent of faculty.

Policy:
The course focus is on in-depth skill development or expanding the scope of practice skills and knowledge. The course is intended to develop advanced clinical skills and knowledge beyond entry-level practice. The course is modified to allow enrollment in one, two, or three hours of credit in any given semester. The student is expected to plan approximately 45 hours of supervised practice for each one (1) semester hour of credit. [NOTE: Three hours of clinical or laboratory hours are equivalent to one classroom hour. Since a semester is 15 weeks of regular classes, each one-hour of semester credit reflects 15 classroom hours or 45 “laboratory” hours.] Three credit hours are required as part of the required curriculum for a total of 135 experience hours. With the modification, a student may elect to complete the three-hour requirements in three semesters (45 clinical hours per semester), two semesters (45 experience hours in one semester and 90 hours in another semester), or one semester (135 clinical hours).

The student and course instructor (advisor) are to establish course goals, objectives, learning activities (methods) and a timeline for completion. The student shall propose course goals and objectives in writing; the instructor will review these plans with the student and offer suggestions for specific learning activities to demonstrate achievement of these goals and objectives. Methods of evaluation and demonstration will also be determined mutually. A written report submitted in a binder that includes the goals, objectives, learning outcomes and log of the time spent on each activity will be assessed by the instructor at the end of the semester to determine the student’s grade for the course.

The student may NOT use activities that are a routine part of his or her job. The student may not use previous experiences such as internship experiences, paid employment experiences, or prior volunteer experiences as part of the hour-requirement. Certainly, these may well enhance the level and quality of current experiences but do not qualify for advanced practice hours.

The course emphasis is on the development and demonstration of advanced and expanded skills. The student may apply hours spent conducting literature searches, meeting with the preceptor, and attending relevant scientific meetings/continuing education presentations, as part, but not all, of the required hours for the course. Students have completed practicums through:

- Heifer International
- UAMS Hospital, Department of Clinical Nutrition
- UAMS Diabetes Clinic
- University of Arkansas Cooperative Extension Service

The locations listed above are not meant to limit student options, but to provide examples regarding the practicum experience.

NUTR 5116: Advanced Clinical Practicum Guidelines:

1. Meet with advisor to discuss general interests and identify a potential preceptor
2. Meet with potential preceptor and begin process of setting up the practicum experience.

Revised 07/2017
3. Develop practicum goals and learning objectives and gain approval from faculty advisor and preceptor.

4. Identify learning activities.

5. Implement approved practicum plan including learning objectives, activities, evaluation methods, learning outcomes, and preceptor(s).

6. Log activities or develop written papers on goal/objective achievement.

7. Submit completed practicum report binder that includes: preceptor letter, goals, learning objectives, time log, learning outcomes, conclusion and/or other material in a binder to course instructor who will assign a letter grade.
**Written Comprehensive Examination:**
The Written Comprehensive Examination will be scheduled during the student’s last semester of **required coursework included on the comprehensive examination**. The advisor and the student will meet to establish eligibility to sit for the examination.

Faculty will set the final date for the comprehensive examination. The advisor will prepare a list of faculty from which the student has taken the required courses.

**Required courses included on the comprehensive exam:**
- NUTR 5107 Advanced Clinical Nutrition OR DIET 5333 Advanced Clinical Dietetics
- NUTR 5102 Assessment of Nutritional Status
- NUTR 5110 Nutrition and Metabolism: Macronutrients
- NUTR 5111 Nutrition Counseling
- NUTR 5106 Nutrition and Metabolism: Micronutrients
- One Designated Specialty Course (NUTR 5113, NUTR 5114, NUTR 5115, or NUTR 5117)

**Duties of the department include:**
- The Department Chair will request questions from each of the faculty approximately one month prior to the examination date.
- The faculty will submit his or her questions within two weeks of the request.
- The Department Chair will prepare a list of faculty from which the student has taken the required courses.

**At the exam:**
- The examination period will be limited to eight (8) hours unless special accommodations have been documented in advance.
- Students will be given a list of the examination questions. The student will select items to be answered as directed.

The Department Chair will send the completed answers to the individual faculty members for grading. A grading scale of 0-100 will be used. The advisor will compile the scores as a percentage and assign a Pass/Fail Grade. In order to successfully complete the comprehensive examination the student must:
- Score greater than or equal to 80% in each course

Graded exams will be returned to the Chair who will give them to the advisor. The Department Chair will notify the graduate school upon the successful completion of the exam.

**Procedures for Retaking a Failed Written Comprehensive Examination**
If any student receives less than 80% in any course then the student must meet with the instructor of that course to satisfactorily demonstrate competency in that area.
- Should the student fail to achieve an overall score equal to or greater than 80% they will be required to retake the failed course(s) comprehensive examination.
- In the event the student fails to achieve a score equal to or greater than 80% on the retake comprehensive examination section, the student must retake and satisfactorily complete the actual course(s) and subsequent comprehensive examination to remain eligible to continue degree work. The process described in this bullet is a one-time opportunity.

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Suggested Tips on Studying/Writing for The Written Comprehensive Examination:

1. Save materials from courses covered on the comprehensive examination as you progress through the MSCN program.

2. After establishing a date for the examination, write a study calendar outlining a study plan.

3. The student may contact course instructors for study suggestions, if desired.

4. Prepare written study notes from course syllabi, class notes, and other reference materials. Major concepts need to be identified and categorized with essential elements.

5. Form a study group to review materials orally to assist in developing mock questions and answers.

6. Allow sufficient time to study ahead – Do not wait until the last minute and try to cram it all in overnight.

7. Get a good night’s sleep prior to the examination.

8. Begin writing with a plan. With six courses and eight hours, each course should be allotted about 1 hour. Pace yourself.

9. Ask the proctor for clarification as needed. If the proctor cannot answer your question(s), the faculty will be contacted by the proctor.

10. The student may bring snacks or lunch and may take short restroom breaks during the examination.
Thesis Option:

Requirements:
1. The thesis option consists of 30 hours of coursework and six (6) hours of thesis credit. The thesis will follow the Graduate School guidelines for a UAMS Thesis; the final product is a thesis submitted to the UAMS Library.

   27 hrs Required courses
   3 hrs Supportive/elective courses
   6 hrs Master's thesis course
   36 hrs Of coursework

2. Passing written Comprehensive Examination. Please see pages 21-22 of the Policies and Procedures section for details regarding this examination.

3. Oral presentation and defense of a written thesis. Please see #9 below under Procedures for details regarding the defense presentation.

4. The faculty research committee will consist of a thesis advisor, at least one other committee member from the Department, and at least one other from outside the Department. A minimum of three members must be selected.

5. Submission of abstract formatted for a National Meeting, such as the Experimental Biology (EB) or the Food and Nutrition Conference and Expo (FNCE) annual conferences. All faculty research committee members will be included as co-authors.

Procedures:
The student will obtain guidelines for Thesis Preparation from the Graduate School (http://gradschool.uams.edu/students/thesis-and-dissertation-preparation/) prior to writing the initial proposal.

1. After the selection of a research topic, the student will propose the composition of the thesis committee. Upon agreement, the advisor will forward the appropriate thesis form to the Dean of the Graduate School for formal approval. (See page 35 for a copy of the Thesis Advisory Committee form – also available at: http://gradschool.uams.edu/students/forms/)

2. The student will write a thesis proposal and submit it to the advisor. With approval of the advisor, the student will submit the proposal to the thesis committee.
   - Students are required to have a minimum of two committee meetings each year; for example, one per semester.
   - The UAMS Graduate School Student Advisory Committee Report form must be completed at each meeting. The research advisor will send a copy of the completed report form to the Graduate School. (See page 36 for a copy of this form – also available at: http://gradschool.uams.edu/students/forms/)
3. After review by the faculty research committee, a full protocol will be developed, approved by the committee, and submitted to the UAMS/ACH/CAVHS Human Research Advisory Committee for approval. If the research involves animals rather than humans, the protocol will be submitted to the UAMS Animal Care and Use Committee.

4. The thesis will be developed using the traditional research outline format as follows:

A. Title
B. Abstract
C. Introduction and Objectives
D. Literature Review
E. Methods
F. Results
G. Discussion and Conclusions
H. References
I. Appendices, e.g. IRB approval, instruments, procedures

5. Upon passing the written Comprehensive Examination, the student will complete the research thesis and defense.

6. All thesis chapters must be presented in draft form to the advisor at least six (6) weeks prior to the defense.

7. The advisor provides corrections to be made before the student distributes the thesis to the entire committee. The committee must receive the written thesis at least two weeks before the oral defense.

8. Committee members will bring corrections/suggestions to the oral defense.

9. The oral defense should be a PowerPoint (or compatible format) presentation between 45-60 minutes in length, followed by an additional period for questions immediately after the oral presentation. After the question/answer period, the thesis committee will meet in closed session to determine the student’s status (i.e., pass, fail, pass with corrections or revisions). The defense process detailed here should take approximately 2 hours.

10. The advisor will review the final corrections and, if judged satisfactory by advisor, the thesis will be considered approved for the student to send forward to the UAMS Graduate School and Library. The written thesis should be submitted to the library at least ten (10) days before graduation. One copy of the revised thesis as accepted by the UAMS Library will be given to the Department Chair, the advisor, and any additional faculty research committee members.

11. A pass status is in effect when the Library has accepted the thesis, and the advisor will submit a final letter grade for the thesis and formally notify the Department Chair that all degree requirements have been met.

12. Upon notification from the advisor that all degree requirements have been met, the Department Chair will submit a formal letter to the Dean of the Graduate School that the student has satisfactorily completed all degree requirements.
13. If the advisor judges the revisions not to be satisfactory, then the entire committee will reconvene, review the revised thesis, make corrections or suggestions, and allow for revision. If the advisor is satisfied with the second revision, the thesis will be considered approved for the student to forward to the UAMS Graduate School and Library. If the advisor is not satisfied, the process may be repeated; if the advisor is not satisfied by the third attempt, the student status would be changed to fail.
Non-Thesis Option:

Requirements:
1. The non-thesis option consists of 33 hours of coursework and three (3) hours of clinical nutrition special project credit. The research project paper will follow the guidelines outlined below; the final product is a written research project report submitted to the Department Chair and faculty research committee members.

27 hrs  Required courses  
  6 hrs  Supportive/elective courses  
  3 hrs  Research work  
  36 hrs  Of coursework  

2. Passing written Comprehensive Examination. Please see pages 21-22 of the Policies and Procedures section for details regarding this examination.

3. Project Advisory Committee: At least three (3) from the graduate department faculty.

4. A full protocol will be developed, approved by the committee, and submitted to the IRB Committee for approval as required.
   • A student must meet with her/his research committee in-person at least once to discuss project details; for example, a proposal meeting – which may include discussion of project justification/background, purpose, research question and/or hypothesis, methods and proposed time-line for completion.

5. A written project report using traditional research outline format as follows:
   A. Title  
   B. Abstract  
   C. Introduction and Purpose  
   D. Literature review  
   E. Methods  
   F. Results  
   G. Discussion and Conclusions  
   H. References  
   I. Appendices, e.g. Survey instrument, IRB approval letter, etc.

6. Oral report presentation of the project to faculty and other students. Please see #4 below under Procedures for details regarding this presentation.

7. Submission of the revised final project report to Department Chair and members of the faculty research committee at least 10 working days before the end of the semester.

8. Submission of abstract formatted for a National Meeting, such as the Experimental Biology (EB) or the Food and Nutrition Conference and Expo (FNCE) annual conferences. All faculty research committee members will be included as co-authors.

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Procedures:
1. The advisor and the student will agree upon a project topic and membership of a project advisory committee. The student will prepare a brief proposal to be approved by the faculty research committee.

2. A full project protocol will be developed upon approval from the faculty research committee and will be reviewed prior to submission to the UAMS/ACH/CAVHS IRB Committee. Animal projects will be submitted to the UAMS Animal Care and Use Committee.

3. Appropriate deadlines for completion of the project will be outlined by the student and the advisor.

4. Students should practice the oral defense presentation with an advisor as much as needed. This oral defense should be between 45-60 minutes in length, followed by an additional period for questions immediately after the oral presentation. After the question/answer period, the research committee will meet in closed session to determine the student’s status (i.e., pass, fail, pass with corrections or revisions). The defense process detailed here should take approximately 2 hours.

5. The committee will bring final corrections and suggestions to the final defense. The advisor will call for questions after the presentation. The advisor retains the prerogative to limit the questions to the committee and will indicate when it is appropriate for the audience to leave. Following the presentation, the committee will meet in closed session to recommend acceptance, non-acceptance, or acceptance contingent upon satisfactory revisions to be submitted to the advisor.

6. The advisor will review the corrected report. One original and one copy of the final revised non-thesis project will be delivered to the Department Chair and additional final copies will be distributed to the advisory committee members.

7. A pass status is in effect when the final revised report has been judged satisfactory and the advisor will submit a final letter grade for the project paper to the Department Chair.

8. If the advisor judges the revised project report to be unsatisfactory, the committee will reconvene to make additional corrections or suggestions. The process may be repeated no more than three times.

9. The advisor will write a formal letter or email indicating satisfactory completion of the non-thesis project and grade to the graduate school, cc’ing the Department Chair, indicating that the student has completed all degree requirements.
Suggested Tips on Planning a Thesis or Non-thesis (Research in Nutrition) Project
[Available at the back of the handbook (page 34) as a checklist page to help keep you on track]

1. Identify a faculty member with whom you wish to do a thesis or non-thesis research project. You may want to have preliminary meetings with several before selecting one.
2. Once a general topic has been identified, do at least a preliminary literature search.
3. Meet with the thesis/non-thesis research project advisor and identify potential committee members.
4. Invite appropriate number of faculty members to serve on your thesis or non-thesis research project committee. Orally discuss the project with each individual. (Non-thesis a minimum of 3 from the department and for the thesis a minimum of 2 from inside the department and 1 from outside the department.)
5. Once a faculty person verbally agrees to serve on your committee, follow up with a formal written letter (as an email attachment) with a title and brief description of your project.
6. Establish a first preliminary meeting of your committee to acquaint them with each other and with your project.
7. At the first meeting have a preliminary sketch of your idea(s) and ask for their input. A written research question(s) and a tentative timeline will enrich the discussion and make the meeting more productive. Outside faculty may bring a fresh and different approach than you and your advisor had first considered. They may advise against the project or suggest a more realistic project.
8. Decide on the next meeting and dates/times for getting materials to your committee members.
9. Follow-up with their suggestions.
10. Meet all IRB and CLARA requirements.
11. Begin data collection when formal approval is received.
12. Meet with your advisor over the preliminary data. Then set up a committee meeting.
13. Make time commitments and appointments with the committee and KEEP them.
14. Write, review, rewrite, and review until committee members are satisfied. Several revisions may be necessary.
15. With advisor and other committee members, establish a date for defense.
16. The advisor will provide the full committee with a final draft of thesis/paper (approved by the advisor) within at least 4 weeks prior to the graduate school deadline for reporting final grades.
17. Be prepared to make final revision(s) after defense.
18. Submit to the library (thesis) or to advisor for final paper (Non-thesis Option).
19. Distribute final revised copies to the advisor and other committee members as well as one for the Department permanent files.
20. CELEBRATE!!!!
Frank McGehee Memorial Travel Award for MSCN students:

Procedure:

1. The student must write an abstract of their research project in MSCN program according to the abstract requirements for one of the national meetings such as Experimental Biology (EB) or the Academy of Nutrition and Dietetics. The student must submit an abstract within at most 12 months after graduation.

2. Advisor or Department Chair will submit student abstracts to the national meeting. Advisor or a faculty member must be a member of the society to which the student abstracts will be submitted.

3. Department will pay the abstract submission fee.

4. Students may apply for/receive additional travel awards if allowable and as long as the total dollar amount of the award(s) does not exceed the total cost of attendance paid by the student.

5. After the student’s abstract receives acceptance as an oral or poster presentation, the student will apply for the $500.00 McGehee Travel Award to attend the meeting.

6. The Department Chair will notify the student about the status of their award.

7. The student must apply for early meeting registration as “Non-member Graduate student” for EB meeting or as Graduate student for Academy of Nutrition and Dietetics in order to avoid any late registration fee. The student keeps the receipt for registration payment.

8. The student should start to work on the poster or oral presentation with the advisor at least six weeks before the presentation at the national meeting.

9. Advisor will send a copy of previous student poster presentation to the student to use as example.

10. The Department will pay for printing of the poster.

11. The student will make his/her own transportation and hotel reservations and pay for meeting registration fee, travel/transportation, hotel and meals.

12. After attending and presenting the presentation at the national meeting, the student will submit the original copies of all meeting-related receipts (registration fee, hotel, meals and transportation) to the Department. The student will receive up to a $500.00 reimbursement for the trip.

13. Student must acknowledge at their poster or oral presentation that the travel fund was provided by Frank McGehee Memorial fund.
**Evaluations:**

**Instructor and Course Evaluations:**
At the end of each semester, you will be asked to evaluate the course and the instructor online through Black Board. A CHP standard evaluation form will be used to document faculty performance and course effectiveness. You will be able to provide written comments on the evaluation. In addition, some instructors may ask you to do interim feedback either verbally or in writing. Additionally, you may be asked to provide an annual program survey, even after you graduate.

**MSCN Degree Program Evaluation:**
In order to continuously improve the MSCN Degree Program, you will be asked to provide constructive feedback throughout your graduate study and after graduation. Alumni can serve to maintain high standards and strengthen the future program by evaluating practice needs, recruiting future students, and financially supporting the program through gifts and memorials that provide discretionary funds so essential to quality programs.
Recent publications from former MSCN students (student’s name in bold)

**Peer-reviewed papers:**


**Abstracts 2016**

1- Hakkak R, **Bell A,** Korourian S. Effects of Obesity and Soy Protein Diet on Feed Intake and Serum Leptin Level in Female Zucker Rats. *FASEB J* 2016; 915.30.


4- **Delavan L,** Crook T, Phelps J and Hakkak R. Associations between Weight-Related Variables, Gender, and Age in Overweight and Obese Preadolescents and Adolescents. *FASEB J* 2016; 30:687.1.

**Abstracts 2015**


3- **Wells J,** Vermani M, Crook T, Phelps J and Hakkak R. Influences on Breastfeeding Exclusivity and Duration. *FASEB J* April 2015 29:581.2


6- **Markovic S**, Phelps J, Crook T and Hakkak R. Eating Habits and Patterns of Female College Athletes. *FASEB J* April 2015 29:733.1

7- **Ezmirly M**, Phelps J, Crook T and Hakkak R. Comparison of Selected Micronutrient Intakes Between Vegans and Omnivores Using Dietary Reference Intakes. *FASEB J* April 2015 29:587.15


**Abstracts 2014**


5- **Drake E**, Gonzales D, Crook T and R Hakkak. Examination of the knowledge and consumption of fruits and vegetables of 7-11 year old children at the Boys & Girls Club. *FASEB J* April 2014 28:808.15


7- **Bowden M**, Phelps J, Crook T, Gonzales D and R Hakkak. Examination of Relationships among Dietary Factors and Bone Mineral Density in Adolescents. *FASEB J* April 2014 28:810.8


Revised 07/2017
Frank McGehee Memorial Travel Award for MSCN students

UAMS – Department of Dietetics and Nutrition

APPLICATION FOR TRAVEL FUNDS TO ATTEND SCIENTIFIC MEETINGS

1. Name:

2. Major Graduate Advisor:

3. Name of the Meeting:

4. Location and Meeting Dates:

5. Title of presentation:

6. The abstract presentation is: An oral presentation ( ) A poster presentation ( )

7. Please include a copy of:
   A: The submitted Abstract
   B: Official notification of acceptance and type of presentation (oral/poster) to the meeting.

8. Home Address:

9. Approval of Major or Graduate Advisor and Date:

10. Student’s Signature and Date:

11. By approving this application, I affirm that $500.00 in funds will be available from the McGehee Memorial Fund to pay some of the expenses as outlined in Department of Dietetics and Nutrition McGehee Travel Award policy.

12. Approved for funding by Chair Department of Dietetics and Nutrition:

   Amount approved: $500.00
### Suggested Tips on Planning a Thesis or Non-thesis (Research in Nutrition) Project:

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify a faculty member with whom you wish to do a thesis or non-thesis research project. You may want to have preliminary meetings with several before selecting one.</td>
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<tr>
<td>2. Once a general topic has been identified, do at least a preliminary literature search.</td>
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<tr>
<td>3. Meet with the thesis/non-thesis advisor and identify potential committee members.</td>
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<tr>
<td>4. Invite appropriate number of faculty members to serve on your thesis or non-thesis research committee. Orally discuss the project with each individual. (Non-thesis a minimum of 3 from the department and for the thesis a minimum of 2 from inside the department and 1 from outside the department.)</td>
<td></td>
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<tr>
<td>5. Once a faculty person verbally agrees to serve, follow up with a formal written letter with a title and brief description of your project.</td>
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<tr>
<td>6. Establish a first preliminary meeting of your committee to acquaint them with each other and with your project.</td>
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<tr>
<td>7. At the first meeting have a preliminary sketch of your idea(s) and ask for their input. A written question(s) and a tentative timeline will enrich the discussion and make the meeting more productive. Outside faculty may bring a fresh and different approach than you and your advisor had first considered. They may advise against the project or suggest a more realistic project.</td>
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<tr>
<td>8. Decide on the next meeting and dates/times for getting materials to your committee members.</td>
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<tr>
<td>9. Follow-up with their suggestions.</td>
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<tr>
<td>10. Meet all IRB and CLARA requirements.</td>
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<tr>
<td>11. Begin data collection when formal approval is received.</td>
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<tr>
<td>12. Meet with your advisor over the preliminary data. Then set up a committee meeting.</td>
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<tr>
<td>13. Make commitments to the committee and KEEP them.</td>
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<tr>
<td>14. Write, review, rewrite, and review until committee members are satisfied. Several revisions may be necessary.</td>
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<tr>
<td>15. With advisor and other committee members, establish a date for defense.</td>
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<tr>
<td>16. Provide full committee with final draft of thesis/paper approved by committee chair within at least 4 weeks prior to the graduate school deadline for reporting final grades.</td>
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<td></td>
</tr>
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</tr>
<tr>
<td>20. <strong>CELEBRATE!!!!</strong></td>
<td></td>
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</tbody>
</table>

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Student Signature ________________________________

Revised 07/2017
Thesis Advisory Committee

Per the guidelines contained in the UAMS Graduate Student Handbook and the UAMS Graduate School Catalog for awarding the Master of Science degree, the faculty members listed below are designated to serve as the Thesis Advisory Committee for ________________________________.

Program: ________________________________

Please print/type name of major graduate advisor ________________________________.

(Please Print/Type names of Thesis Advisory Committee and graduate program affiliation):

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Date ___________________________ Signed ____________________________ Student

Date ___________________________ Signed ____________________________ Advisor

Date ___________________________ Signed ____________________________ Graduate Program Coordinator

Date ___________________________ Reviewed ____________________________ Dean of the Graduate School
UAMS Graduate School Student Advisory Committee Report

Student: ___________________________ Date: ___________________________

Degree sought: Doctora [ ] Masters [ ]

1. General (All ratings of Needs Improvement must be documented with an attachment)

<table>
<thead>
<tr>
<th>Needs Improvement</th>
<th>Basic</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Solving</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Research Progress (All ratings of Needs Improvement must be documented with an attachment)

<table>
<thead>
<tr>
<th>Needs Improvement</th>
<th>Basic</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee Chairman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committee Member #2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Committee Member #3</td>
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<tr>
<td>Committee Member #4</td>
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<tr>
<td>Committee Member #5</td>
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</tbody>
</table>

Comments:

3. Communication Skills (All ratings of Needs Improvement must be documented with an attachment)

<table>
<thead>
<tr>
<th>Needs Improvement</th>
<th>Basic</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Presentation</td>
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</tr>
</tbody>
</table>

Comments:

4. Recommendations (may attach additional sheets if necessary)

Courses:

General:

5. This student is [ ] is not [ ] ready for the candidacy exam. Not applicable: _________

6. Proposed defense date (if applicable): ______________________

7. Discussed Individual Development Plan (IDP): Yes [ ] No [ ] N/A (not required for MS) [ ]

COMMITTEE MEMBER SIGNATURES-Print and Sign

1. ___________________________________________ 4. _______________________________
   MAJOR GRADUATE ADVISOR

2. ___________________________________________
   Committee Member

3. ___________________________________________
   Committee Member

5. ___________________________________________
   Committee Member

6. ___________________________________________
   Committee Member

Revised 07/2017
This is to acknowledge that I, the undersigned, have received and read the UAMS Department of Dietetics and Nutrition Master of Science in Clinical Nutrition GRADUATE STUDENT HANDBOOK. 

Signature: ___________________________________________  

Date: ____________________________  

Revised 07/2017